

ARCHITECTURE

THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOL. XXXIX

JANUARY, 1919

No. 1

The Bush Terminal Sales Building

Helmle & Corbett, Architects

By H. S. Gillespie

AN observing foreigner, accustomed to the beauty of European cities, when asked for his impressions of our American product, replied: "Your cities? Oh! they are just streets without ends, buildings without roofs, side walls without decorations, front walls with too much, and tanks, pent-houses, and signs." Was he right? Look up or down one of our principal avenues and answer for yourself. We do not end our streets, we simply let them peter out; we do not roof our buildings, we simply let their topmost "in'ards" remain forever exposed. We leave the side walls, the most conspicuous part of our buildings, to bask in adorned ugliness, while we slather our fronts with every conceivable style (and some inconceivable ones), ranging all the way from the late Adam period back to the Adam and Eve period. If the architects don't know where to put their decorations to have them count, the advertisers surely know where to put their signs to have them read—they use the undecorated side walls for the very simple and common sense reason that in any view up or down our streets side walls are all one sees.

Some future parking commission, some city beautiful committee, may give us endings for our streets and give us an ending of the sign nuisance, too; but in the meantime—a very long and a very mean time, probably—any conspicuous effort to treat all sides of a building with equal interest and provide a real visible roof in the bargain should deserve particular mention.

In the recently completed Bush Terminal Sales Building, in West 42d Street, Manhattan has acquired one of these rare architectural landmarks whose beauty is not likely soon to suffer eclipse. The new zoning law rang the death-knell of the sky-scraper, and there will be no more of these castles in the air, no more at least in the greater city, and if not here, then where else, pray, would any venturesome spirit aspire to produce them?

When Mr. Irving T. Bush, president of the Bush Terminal Company, who, a quarter of a century ago, conceived the idea that later crystallized in the big terminal development now a model of its kind the world over, decided to extend his field of operations in Manhattan and erect a permanent exhibition building where manufacturers everywhere could show their goods in a distinctive and individual manner, he secured the services of Messrs. Helmle and Cor-

bett, of Brooklyn, to design the building. The superb structure, generally conceded to be one of the finest in New York, shows how successfully they fulfilled their task.

Few modern sky buildings of the sky-scraper class presented so many unusual problems in engineering, construction, and architectural treatment. Towering four hundred and fifty feet in the air, the tower portion covers but fifty by ninety feet of ground space, the smallest area of any building in the world for its height except the Washington Monument. To secure a substantial base for this mighty frame it was necessary to go down fifty feet below the street level before proper foundation was reached. Although the present building extends through the block to 41st Street with a nine-story extension over the rear portion, the building operation started on the front lot only and all the material for the entire tower



42d Street entrance.

was brought to the building through 42d Street, one of the busiest thoroughfares in the city, where traffic is never suspended night or day. It would seem as if the work of construction would have been hampered to an almost unbelievable extent under the restricted means of access, and yet, by having the steel for the structure fabricated, the stonework, brick, and terra-cotta in the yards ready for delivery before the foundation was finished, there was no delay whatever caused by lack of material nor any blocking of traffic either on street or sidewalk.

The unusual engineering feature of the work was to



Staircase gallery, second floor.



Detail, third floor.

provide proper resistance to the overturning movement of the wind. This great strain naturally came across the fifty-foot width of the building, and there being no interior partitions in which to conceal diagonal struts, heavy reinforcements with strong knee-braces at the column points had to be introduced. Also the necessity in the plan for a wider space at one point on the three lower floors than was possible to get between the regular column spaces was another problem that came up for solution. Two columns, carrying a total of one thousand three hundred tons, resting on a pair of cross-girders seventy-two inches deep with a seventy-five-foot clear span, were added on the fourth level to meet this contingency.

Since any building ten times higher than it is wide is actually a tower, some special treatment of the upper portion was obligatory to give it the appropriate finish, and the tanks, chimneys, and pent-houses which disfigure the tops of most of our buildings had to be concealed within fittingly proportioned walls. In deciding upon a style of architecture for the building, the choice lay between one that would exaggerate the height or one that would diminish it. Distinction in building, like distinction in dress, comes from accentuating the natural peculiarities rather than in concealing or belittling them, so the

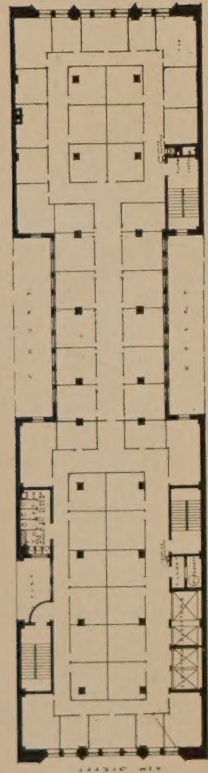
Gothic was selected as the inspiration for the architectural treatment, although it is handled with a remarkably modern touch.

Built in the centre of a block, the side walls are blank as to windows, and no space could be sacrificed here for reveals, nor could any encroachments on neighboring property for projections be permitted. Yet these side walls were as conspicuous a part of the building as the front, if not more so, and some form of architectural embellishment that would bring them into harmony with the front, to dress them up, so to speak, and make them, with the front, an architectural unit, was demanded.

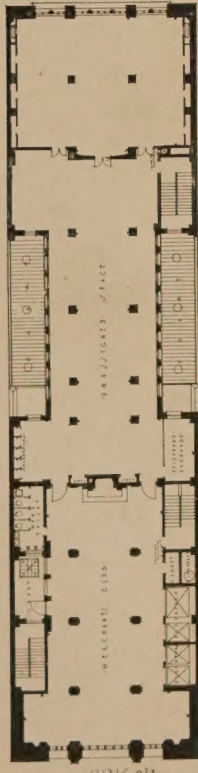
Since cornices or projections of any sort were not permissible on the sides, a scheme of design was chosen which required no projections on front, rear, or sides. Reveals, too, were impractical on the sides, so some device had to be discovered by which reveals could be simulated without sacrificing space or incurring undue expense. By the judicious use of a little "architectural camouflage," the colors being supplied by three tones of brick, the desired effect was obtained, and an entirely new and original treatment of side walls, so painfully neglected in most of our buildings, was evolved. Black brick was used for the shadows and white for the high lights, the result being quite as effective as



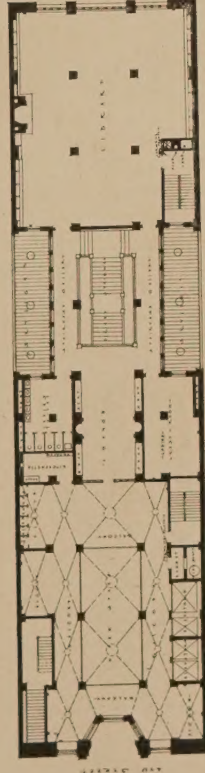
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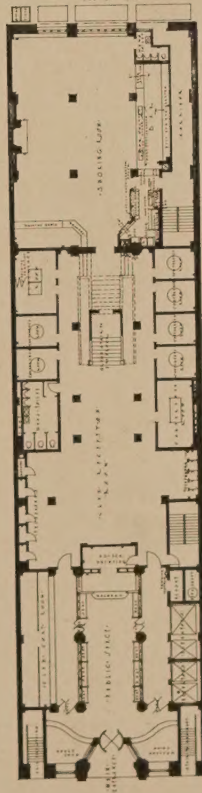
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11TH FLOOR PLAN



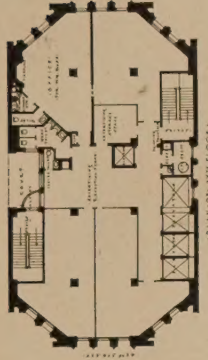
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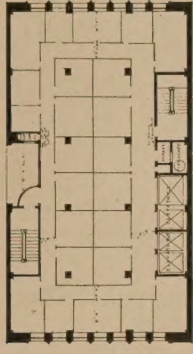
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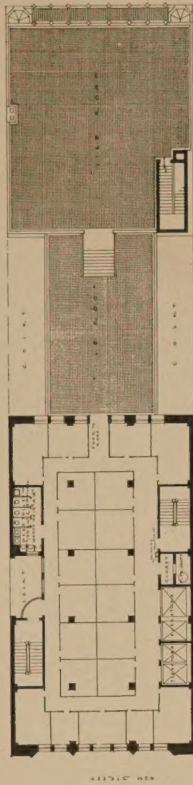
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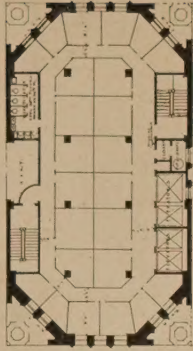
5TH FLOOR PLAN



4TH FLOOR PLAN



3RD FLOOR PLAN



2ND FLOOR PLAN

though the accustomed architectural embellishments had been used, the light and shadow effect being worked out to correspond with the natural average angle of the sun.

The individuality and distinctive character of the building does not stop on the outside. The interior is quite as unique and original, and here again the plan, as well as the decoration, follows absolutely unconventional lines. Every floor above the third is an open exhibition space, divided by low rails, glass partitions, or booths, where the

buyer can find every manufactured article under the sun on display and make his selection accordingly. The ground and second floor are for an International Buyers' Club, furnished and fitted like an old English manor-house,

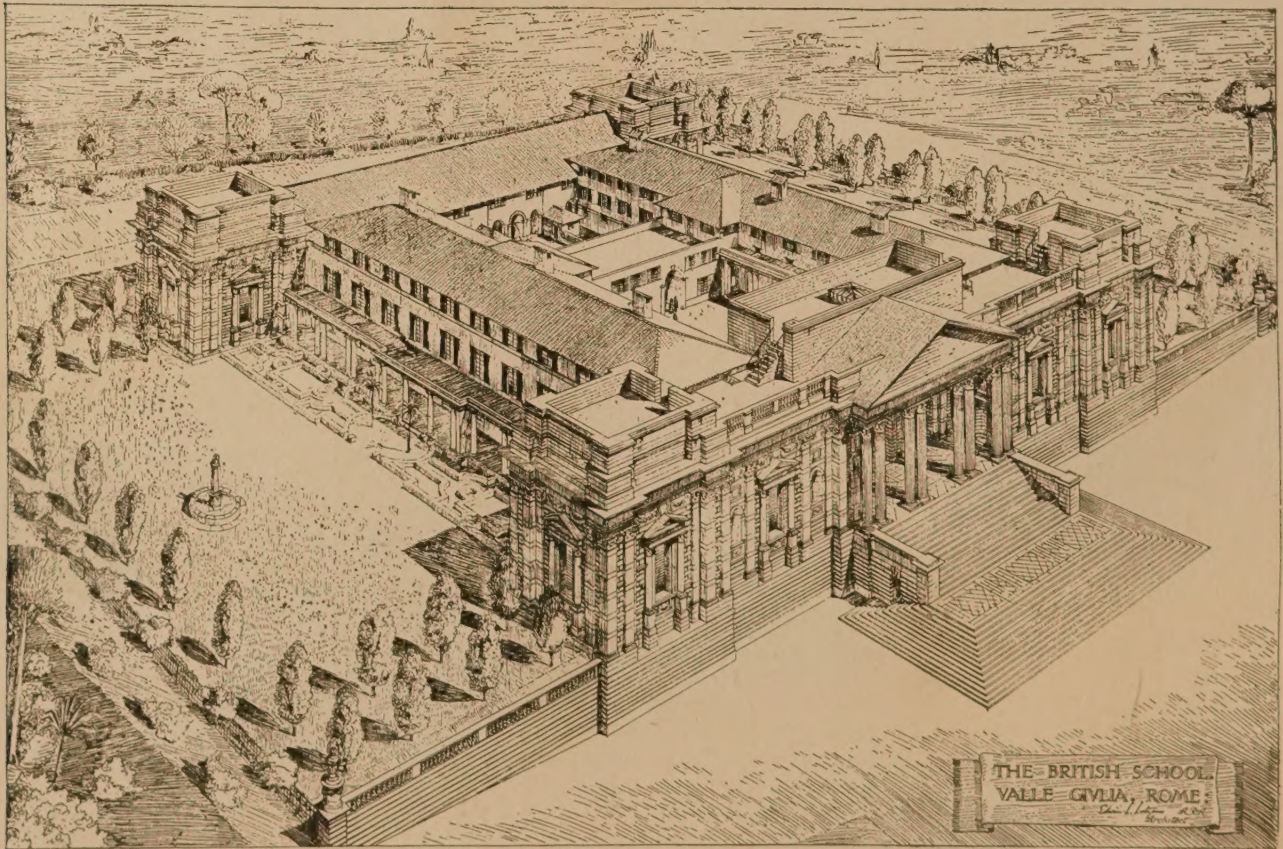


Smoking-room.

with a delightful background of panelled walls, beamed ceilings, and Jacobean furniture. A grand main entrance rising two full stories in height, with a richly carved ecclesiastical setting, is the *coup de grâce* of the building, establishing at once in the mind of the visitor the correlation between its Gothic exterior and the fifteenth-century environment of the club-rooms.

Perhaps the most striking feature of the interior, both in the floors of the club and the merchants' exhibition floors as well, is the quiet harmony in color and

pleasing variety in the use of materials. In fact, the same distinctive note of complete unity which is so remarkably conspicuous in the entire exterior treatment has been carried into the interior with unusual skill and success.



The Spirit and the Letter—Can There Be a Typically American Architecture?

By David Varon

Architecte diplômé, Author of "Indication in Architectural Design," etc.

THE wrecking of Rheims Cathedral and many another jewel of the same class, the losses of which will be moaned long after the war is forgotten, has on the one hand widened the gap between the civilized world and the vandals, and on the other it has brought Gothic architecture into the lime-light as never before.

So much has been written on this subject by men both inside and out of the arts that it almost requires a special knowledge to find one's bearings in this flood of literature, much of which is very superficial and imbued with a spirit of pure partisanship. It is well for the scholar to discriminate between the genuine and the imitation, between the true and the false prophets.

It is with architecture as with music. No matter how many books are written on the subject, without the orchestra, the fine organ, or the star soloist all the books are vain efforts. Likewise, without having seen genuine Gothic churches on the very spot where the style was born, the judgment one would form of the style would be very similar to that one might form of foreign operas wailed out by the hurdy-gurdy.

No one who has visited some of the wonderful monuments of the best period of Gothic architecture can deny the deep impression they leave on the mind. Humanity will for many centuries to come feel indebted to the religious as well as civil structures of those times, be they looked upon from the intellectual, æsthetic, or spiritual points of view. To those interested in the history of architecture, particularly with a view to studying the process of the making of a style, there is hardly any better school. Every stone or brick of its productions is a clear demonstration of what architecture ought always to be—construction made decorative. There is hardly any architectural ornament in that style but has some sort of *raison d'être* structurally. "The function should create the form" seems to have been the motto.

After having visited churches, monasteries, town halls, and courthouses, all of the best Gothic period, all brimming with a beauty of their own, one feels no surprise at the attempt made to revive the so-called Gothic architecture. The idea has found many partisans devoted to it even to the point of fanaticism. They declared that a church could not be a real church unless built in the Gothic style. The Beaux Arts school had to sustain many an attack for its not giving the study of the architecture of that epoch a pre-eminent place. It was considered little short of a crime on the part of an art institution to show such neglect and to "forget that many churches are still to be built."

Undoubtedly the intentions of the revivalists were very noble, only they mistook the letter for the spirit. Paraphrasing the saying "Hors l'église point de salut" they made it "Hors le gothique point d'église." Now, if art means anything it is the reflection of life itself. The monuments of the age we have been referring to conform strictly to that definition of art. Their authors did not resort for their decoration to obsolete forms and symbols, but rather to those well expressive of the ideas which were familiar to the masses who

knew the folk-lore. In that folk-lore we must look for the source of inspiration of the devilish forms of those gargoyles so characteristic of the time. To these symbols are attached popular beliefs and superstitions. Whether those were signs of low or high culture, pure or crude belief, is now out of the question. Suffice it to say that the artist strove to assign them a place in the elements he used for his decoration, thus attracting the attention of the man in the street in a forceful manner. The ideas of the last judgment then current among the people, the reward of the just and the punishment of the wicked, were the most usual themes resorted to by the sculptor. It all was naïve and understood by all.

Let us, if you please, revive the enthusiasm which made, in those times gone by, the layman take a deep interest in what was going on in the artistic spheres, and consider the outside of his town hall or his market little short of a poem or a song—and he knew a good many of them. Let us, drawing inspiration ourselves from the *spirit* of those times, encourage the culture of the beautiful and a more intelligent love of nature which is the best source of true poetry. Let us so formulate our programmes of education as to gradually create the craving for purer art and reach the moment—a happy one—when the majority of student architects will go into architecture not because "it pays" but because they feel it to be their calling. Commercialism and "arrivism" are the two sores that just at present affect greatly our profession.

Many took the stand that everything in Gothic architecture is perfectly rational. In this respect it is interesting to see what was thought of the whole system by the late Julien Guadet, one of the foremost teachers of architecture at the Ecole, whose book, "Theory and Elements of Architecture," gave him a world-wide reputation. The chief characteristics of that master were his common sense, his conscientiousness, and his broad-mindedness. Winding up one of the chapters of his book, in the third volume, which deals mainly with ecclesiastical architecture, and speaking of the Gothic church, here is his judgment:

"Here, then, you have the flying-buttress type of a church, which type was general from the thirteenth century on. I spoke to you of the naves, mainly on account of their justifying the rest of the composition. But all that precedes holds good with any part of a church having side aisles, transept, etc.

"The flying buttress, you can readily see, is the main-spring of all these compositions. This architecture is based upon the permanent propping-up process accepted as a means of securing definite stability. This is what makes both the originality and the unremitting servitude of this theory. Let us then examine the strong and the weak points of the flying buttress, its advantages and its dangers, for the judgment we shall pass on it will apply to the religious architecture of the Middle Ages.

"Assuredly, the conception of the flying buttress is a bold one, almost paradoxical. As it is with everything, it came by degrees. To-day, after we have seen it so often, we have grown used to it, and it fails to impress us with surprise. We hardly look at it. But suppose for a moment

that, running contrary to all traditions, they should build, all on a sudden and for the first time, an edifice so propped up; take, for instance, Notre Dame as it is seen from the 'Île St. Louis.' What would the impression be? Astonishment first, and then a hard resistance. The mind accepts readily what is natural and simple, but does not yield without a struggle to whatever runs against nature; it does not admit from the first onset the necessity of props for the rising structure, still less will it accept that these props serve as the permanent means of assuring the durability of the edifice. These props, or crutches, would give the spectator the impression of an irretrievable infirmity, the treatment of which is of the province of 'monumental orthopedy.'

"But if one should enter the building he is entranced at the sight of the lofty naves, the aerial vaults, the great traceries, the superimposition of all that over thin, slender piers, dividing the various parts of the church without causing obstruction, the depth and the variety of the different aspects, the surprising impression of the overcome difficulty, the realization of the unattainable, the mixed triumph and mystery. He could account for all that only by a prodigy or a miracle, for the spectator could not see from within the ransom he has to pay for all this beauty. And then I imagine an extremely sensitive pair of scales—on one the splendors, on the other the weaknesses. Which shall win out? The appreciation of the religious architecture of the Middle Ages has greatly varied. From the Renaissance up to the beginning of the nineteenth century people couldn't see in it but barbarism and ignorance. More recently they saw only its magnificences, admiring even its imperfections. Truth—as ever—is between both exaggerations.

"One must admire the very skilful combinations of equilibrium and the results produced; but one must likewise admit the daring side of the expedient—I do not take the word back—which form its mainstay. Look, for instance, at Notre Dame; should only a stone fail in one of the flying buttresses, and there comes the collapse of the entire structure. Even though all should be perfectly figured out, nevertheless the very existence of the whole structure depends upon the durability of the flying buttress, a frail element exposed to the destructive causes inherent to the weather and other contingencies. Here is a body the vital organs of which are on the outside. That which is most indispensable to its life is the most exposed."

How lucid the above criticism is and how fair! Gaudet admires what is admirable, but he does not want to accept as permanent that which has the appearance of being temporary. Probably had those artists had at their disposal the same sort of materials which we have to-day, our means of reinforcement and our fine cement, those flying buttresses, looked upon with so much sense of religion, would never have come to life.

It is about time we should see that the beauty of the Gothic architecture lies neither in crockets nor in flying buttresses—no matter how ingenious the contrivance be—in pinnacles nor in gargoyles, but in its proportions, which proportions were observed by the authors of St. Eustache, that other famous Paris church, but of the Renaissance style. They preyed on the secret of the beauty of the churches built in the preceding centuries, and while they adopted the Gothic skeleton they clad it with Renaissance forms and ornaments. Those proportions were the real invention of the Middle Ages. All the rest, as says Guadet, was justified by them. Many a disillusioned student coming back from St. Peter's of Rome, so huge in size, is glad to refresh himself

in Notre Dame, and as well in St. Eustache, and to see a composition that looks bigger, even though it is much smaller than St. Peter's. In the Gothic church, and as well in St. Eustache, the student can easily discover for himself the law of scale, the thorough mastering of which means so much in architecture, and the understanding of which has baffled the earnest efforts of so many until they could see no longer mere images but actual monuments.

Yes, indeed, let us revive by all means the *Gothic spirit* of the days when youths would gladly walk from their distant town to Paris, to get first soaked with beauty and then beg for admission in one of the many building corporations; that spirit which enabled the apprentice to stand all the hardships attending the years of preparatory work sustained only by the dream of achieving, in turn, some day a masterpiece like the master's, and if possible outdo it.

With the talent I have observed in our colleges of architecture, with the variety of modern programmes, the wide range of materials, the splendid development of the art of building, what do we need for the attainment of that supreme goal so much longed for—the creation of a genuine American style? The question is a very serious one and could hardly be solved while standing on one foot. I could not even approach the outline of a possible solution within the limits of this writing. However, we may from the foregoing derive some conclusions: First and foremost, we should be able to look upon everything with unbiassed minds. Thus, being not quite intimately familiar with the spirit of the Ecole, we can hardly understand it, and when we attempt to pass a judgment on its methods we are bound to fail, because our criticism is based on superficialities—the letter. A serious survey of those methods will prove that they answer the local purpose to perfection. If those methods cannot succeed when transplanted and subjected to a process of hot-house culture, why blame the Ecole for the fact?

Secondly, a style cannot be artificially forced upon the public. The style of an epoch must be directly correlated to its contemporaneous life. Do not we have our modern geniuses and their respective achievements to celebrate and commemorate? Is not the source of inspiration, nature, still brimming with the eternal principles of the beautiful? Is not the fountain of youth eternal? On the other hand, while nature is *one*, is there not a variety in this *oneness*? The survey of Gothic architecture shows at once the splendid working of this principle of variety in unity. Thus, while the Greeks and Romans delighted in the acanthus leaf, the Middle Ages turning to the local flora did wonders in the line of conventionalization.

If the devotees of Gothic architecture want to be true to themselves, they ought to apply the same spirit of worship and admiration to our local vegetal elements, with a view to making use of them in the decoration of our structures, as did those who borrowed the cabbage, the cowslip, and other plants for their decorative value.

Thirdly and lastly, a single moment of consideration shows us that the Middle Ages, whether they sought it or not, were individualists. Having problems to solve, they did not spend their time studying archaeology, but, daring to be themselves, units of their time, faced those problems with an utter independence. Deep logic, a genuine love of the beautiful, and a sincere respect for the life of their contemporaries—this is what made them famous. They had the spirit.

The Town Site of the New Cornelia Copper Company

By William M. Kenyon

ARIZONA early gave indications of great mineral resources, and became an attractive field for prospectors and adventurers, although the hardships of the desert added many true stories of tragedy.

It is said that Tombstone, without which no EARLY story of MINING IN Arizona ARIZONA is complete, received its name from a prospector who had heard of a fabled deposit located near the fastnesses of Gerónimo. When it became known that he was going in search of the fabled Eldorado, he was advised to take his tombstone with him.

Whether or not this prospector was successful, soon the little settlement became one of the greatest mining centres of the West. Shafts were sunk, mining-machinery was imported from Spain and drawn overland after overcoming tremendous difficulty and hardship, and Tombstone, with its saloons and dance-halls as well as its opportunity for adventure, became one of the liveliest spots on the map.

To-day, although many of the old deserted buildings still stand, and some of the old Spanish mining-machinery is at the mouth of the shafts of the mines, the town is as dead as its name, and the lure of other days is gone.

Ajo, meaning "garlic," in the early days was a collection of a few adobe shacks in a sandy desert country, surrounded by the mountain ranges in a southwesterly part of the State of Arizona, and about forty miles north of the Mexican border. It is difficult to imagine the existence of human beings in a country so desolate, with no vegetation but the mesquite, ocotillo, greasewood, and the various members of the cactus family.

Although there are deer and some other game in certain parts of Arizona, the principal game in this valley are rattlesnakes, tar-

antulas, scorpions, hydrophobia skunks, Gila monsters, and many other specimens of a similar disposition.

The water-holes were few and far between, and the water was used sparingly and only for drinking or culinary purposes.

The usual Mexican or Indian residence or settlement can be detected without great difficulty by other means than sight.

As with other settlements, legends had located valuable

mineral AJO, deposits MINING in the PROSPECTS valley.

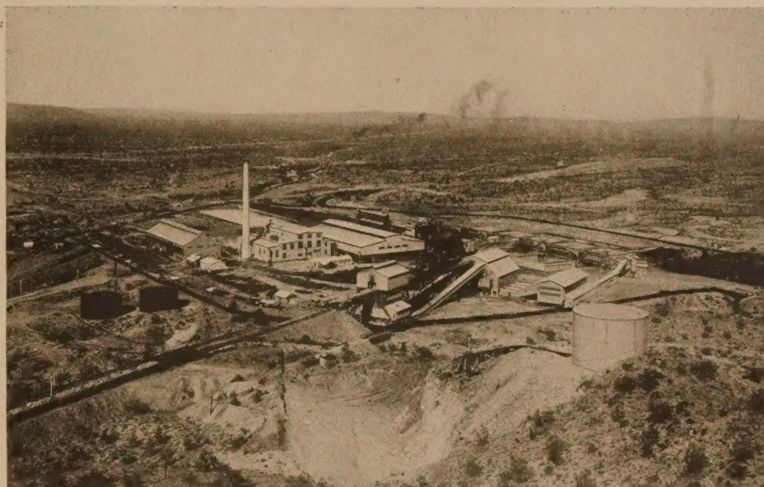
After finding some gold in the washes from the mountains in the black sands of the arroyos, the adventurers became discouraged, and only the legends remained.

After the early-day methods of prospecting for ore had been superseded by more modern and scientific methods, it was discovered that a great body of a low grade of copper ore composed three towering hills at the edge of the range on the westerly side of the valley. For many years the deposit was considered

valueless, as there were no means of reducing the low-grade ore on a profitable basis, and the physical obstacles made the situation anything but attractive.

Finally, some time after the electrolytic process of reducing copper ores was invented, the long-fabled ore deposits were acquired and surveyed. Expert geologists, after many months of work under the most trying conditions, announced forty-three million tons of low-grade, or oxide ore.

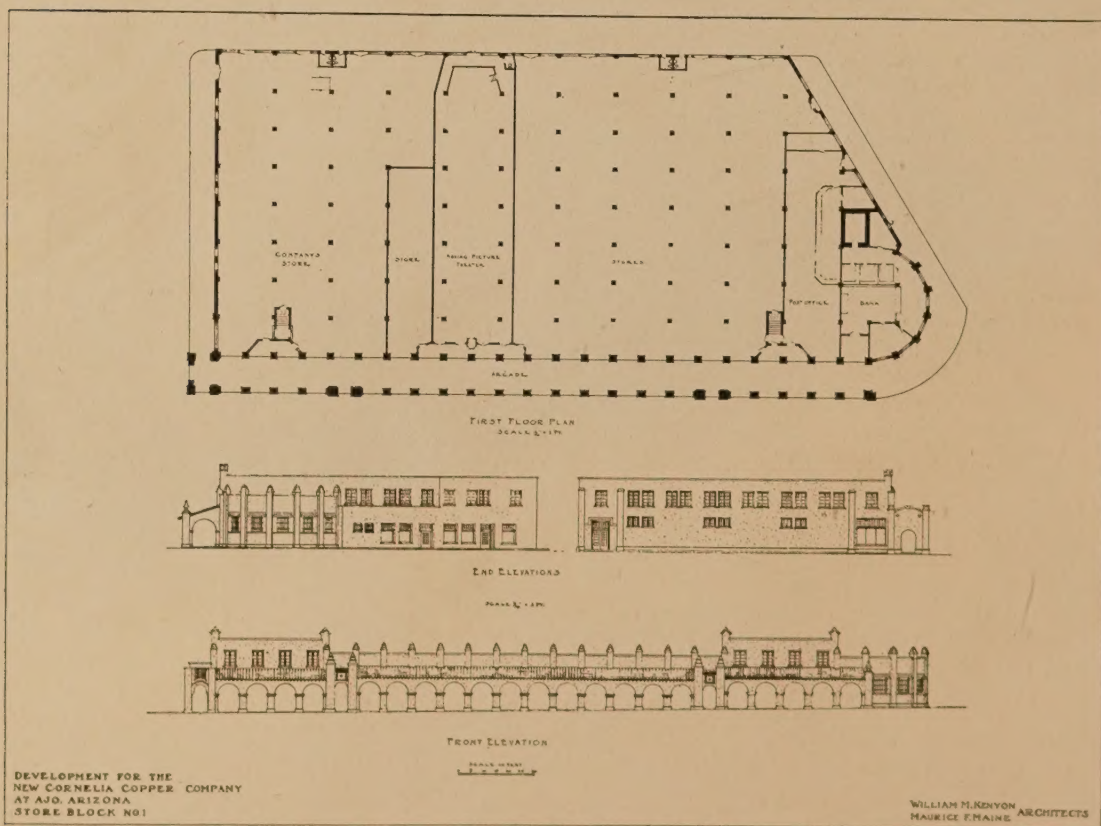
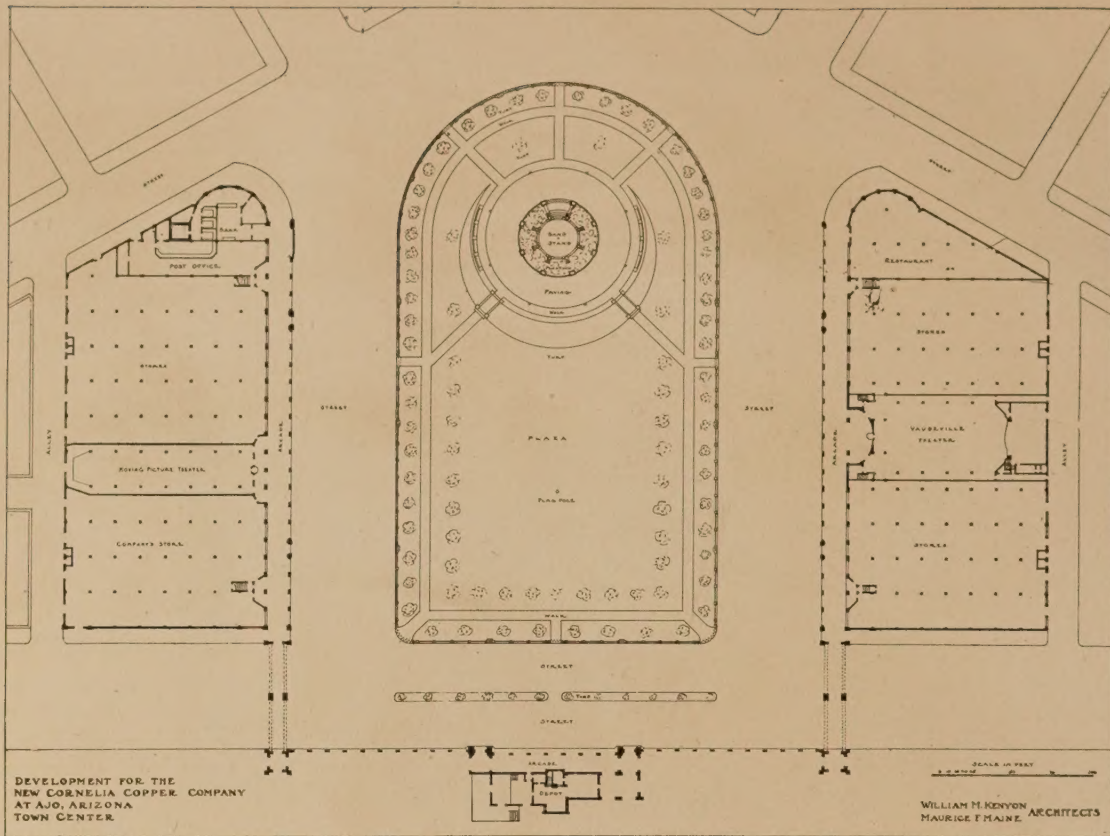
Being forty miles from the nearest railroad, with practically no roads but trails through the desert, the next problem was to determine the practicability of mining the ore and of installing the machinery necessary to reduce the ore. Finally, a small plant capable of crushing and re-

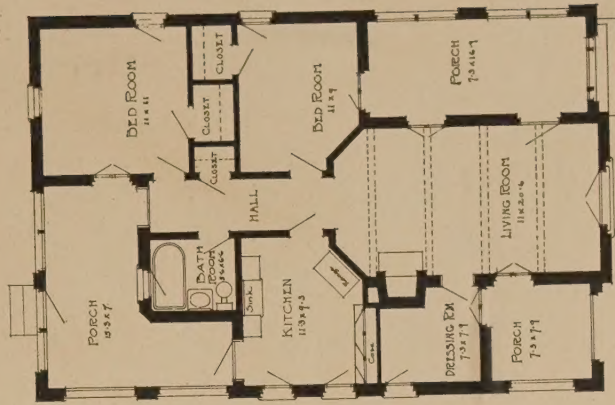
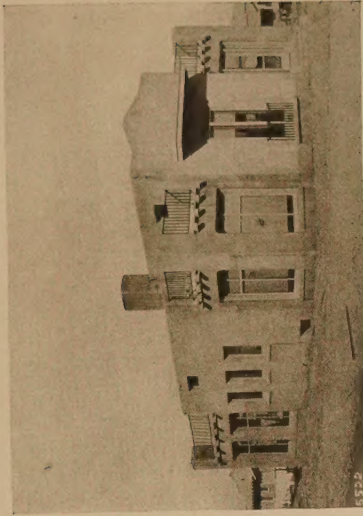


Ajo plant of New Cornelia Copper Company.



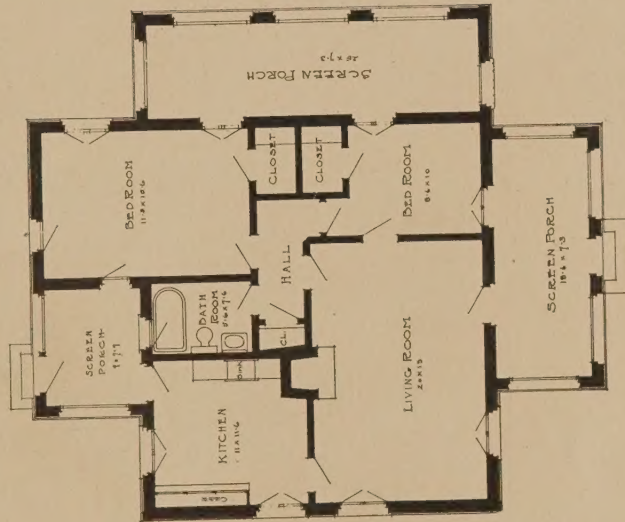
Detail of construction.



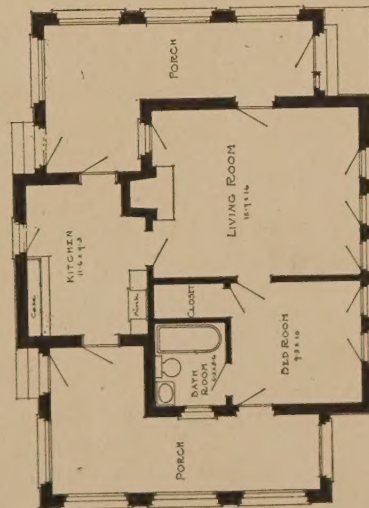
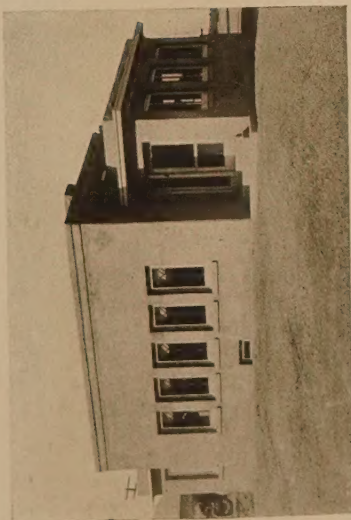


FLOOR PLAN AMERICAN HOUSE NO. 15

Wm. M. Kenyon, Maurice F. Maine, Architects.



FLOOR PLAN AMERICAN HOUSE NO. 3



FLOOR PLAN AMERICAN HOUSE NO. 3

AMERICAN HOUSES, TOWN SITE OF THE NEW CORNELIA COPPER COMPANY, AJO, ARIZONA.



Detail of construction work.

ducing one ton of ore per day was installed. From the experience gained in operating the small plant, a two-ton plant was installed with such improvements as seemed necessary.

In the meantime rumor had magnified the old legendary story, and the population of Ajo increased rapidly.

The type of architecture of the business buildings and dwellings was of the same general character, and ranged from packing-boxes and burlap bags to empty gasolene-cans pounded out flat and secured to whatever vertical or horizontal supports were at hand. The effect was picturesque in the extreme and was obtained at a very moderate cost. The interior decoration and furnishings of such homes depended, of course, upon the individual taste of its owners. However, the young Papago Buck, with a tin can or coffee-pot as a nucleus, had little difficulty in acquiring all of the other decorations, which usually consist of the squaw and babies.

With the success of the experimental plant, there came in the great minds of the men who had spent thousands of dollars in experiment

a dream of a successful plant and a return on the millions of dollars which would be required to carry out the project.

This would require railroad and equipment, big stone-crushers, sludge-tanks, leaching-tanks, power-plant, water-supply, sewerage, roads, homes, business and public buildings. With the start of the railroad came the real boom town of tents and shanties.

This was followed by two other boom towns immediately adjacent to the company's property.

Ajo had become a place of considerable importance, and, although dry by law as well as by nature, still there was some of the sentiment and atmosphere of the early mining towns.

At an expense of over \$11,000,000, the plant was finally completed. This followed an expenditure of other millions of dollars for the construction of a railroad and equipment.

In the meantime, three town sites had been planned and laid out on the company's property: One town site

for the Papago Indians and one for Mexicans, who comprised the labor element in and around the mines and plant. The third town site was for the whites, who comprised the skilled mechanics and trades, the clerical, the executive, and administrative.

No immediate water-supply being available, wells were sunk seven miles away and the water piped to the new town site. Sewerage-pipes were laid, electricity generated at the plant, and a telephone system installed. Homes, business and public buildings were built with an opportunity for future development and growth. Notwithstanding the scarcity of water, a little park was created with its bandstand in the centre.

Buildings of all characters are constructed of fire-proof materials, thoroughly sanitary and modern in every respect, and what was

once the desert and a legend has developed far beyond the wildest dreams of its creators.



Mexican houses.

No Medals for Builders This Year in New York

Year's Construction Produced No Examples Worthy of Merit

FOR the first time since the custom was established of giving special recognition to construction and architectural design, the Fifth Avenue Association announces that there will be no medals or certificates awarded this year.

The Association's committee on architectural harmony found no subjects to consider, thus pointedly reflecting the effect war restrictions have had upon general building.

H. Van Buren Magonigle, Thomas Hastings, and Eger-

ton Swartwout, technical members of the committee, after considering all buildings presented by the Fifth Avenue Association, reported that it was the unanimous opinion "that no work, either new or alteration, done during the year is in a class which should make it worthy of the distinction of having medals of honor awarded to it."

The lay members, Walter Stabler, Ensign Douglas L. Elliman, and Michael Dreicer, concurred in the findings of the professional members of the committee.

Editorial and Other Comment

The 1919 Outlook

THERE seems to be no doubt whatever in the minds of those who are in close contact with problems of future building construction that a mood of optimism is justified by all the present indications. From all sides preparations are being made to take up the work of building much-needed apartment-houses and dwellings, the alterations of hundreds of old city houses into small apartments, the conversion of industrial plants that have been given to war work into the production of things that are greatly needed in these new and cheerful days of peace. There are hundreds of factories to be extended, new banks to be built, new housing developments to be carried on by private enterprise, public buildings, schoolhouses.

No doubt the great need of American materials for reconstruction work in France and Belgium will tend to maintain high prices, but this has been anticipated and apparently will not make any difference in the general situation or delay progress.

There Will Still Be Architects

"It is rather difficult nowadays to pick up any periodical, attend a meeting, or do anything which has any relation to the practice of architecture and not come upon a general atmosphere of something more or less wrong with either the public, or Uncle Sam, or the present theory and practice of architecture as the practitioner knows it or the architects themselves. One is almost tempted to question the justification of an architect's continued existence as such. Almost any sort of question and answer seems to find full warrant, for, while on the one hand, architects seem moderately and modestly to have been justified in their existence before the war, still, since the war, the justification has been neither moderate nor modest."

THE above quotation is from a most interesting and suggestive letter written by a well-known architect of the Middle West. It is expressive of the mood of the times, of the general feeling of uncertainty as to the future; but somehow we feel that the profession is going right on. Maybe with newer ways in the conduct of business, with a greater concentration of resources and a closer co-ordination between the artistic and practical branches, but, nevertheless, right on. And we are inclined to feel, too, that instead of constant bickerings, of pessimism and discouraging criticism, it might be well to try to arrive at some determinative position, some carefully adjusted information of what needs to be done to restore confidence and to insure some measure of success for every architect worthy of the name.

Hard times test men's souls—we mean character—and a little discipline after days of prosperity is sometimes the only way to make us take stock of our real qualifications and to get down to brass tacks, to inventory and measure ourselves, come to some conclusion as to why we fail and why others succeed. We must never quite discount or fail to appreciate the intangible but effective personal equation that so often makes or mars success in any field of endeavor. The lines from "Julius Cæsar" from which Barrie derives

the title for his new play, "Dear Brutus," might be cast in bronze, carved in stone, or modelled in terra-cotta over the doorways of many offices in many professions:

"The fault, dear Brutus, is not in our stars,
But in ourselves, that we are underlings."

The Status of the Profession

EDITOR ARCHITECTURE,
Fifth Avenue at 48th Street,
New York City, N. Y.

Dear Sir: There has been much letter-writing and comment published in most of the architectural journals of today with regard to the future of the profession of architecture, some good and much bad, but all of which is disturbing the status of the profession very materially.

In the various articles we have been styled as architects, architects and engineers, and one has gone so far as to prophesy that we are to become master-builders, embracing every phase of designing and building.

There are those who are beginning to question whether architects are necessary at all, and it seems to the writer that the discussion has gone about as far as it should without some definite understanding and action on the part of the architectural societies at the earliest possible moment, in order that conditions, which may confront the profession and the public in the very near future, might be approached with some unanimity of thought and action, that the future of the profession be definitely defined, that architects may all approach the after-war condition with a definiteness and a conviction that will carry with it a certainty that the profession has a definite future.

In view of the fact that several States have defined architecture by registration or license law, it would seem that any decisive action as to the future status of the profession should be had this coming winter before the meetings of the legislative bodies in several of the States of the United States have adjourned.

Yours very truly,
EDW. C. VAN LEYEN.

Let the Government Finish the Work

The Great Loss Involved in the Sudden Stopping of Government Housing Projects by S. J. Resolution 194

THE Senate passed, on December 12, the above numbered Resolution directing the U. S. Housing Corporation (Bureau of Housing and Transportation of the U. S. Department of Labor) to stop all work on all government housing projects that are not seventy-five per cent completed and to cancel all contracts in relation thereto.

This resolution was adopted by the Senate upon the ground that it would save money to the taxpayers of the country, a purpose that every one is in sympathy with.

The action taken, however, is not well considered. It is opposed strongly by the officials of the U. S. Housing Cor-

poration, who had already of their own volition before Congress acted, stopped all work and terminated contracts wherever, in their judgment, there would not be permanent demand after the war in peace times for such housing projects, and therefore the money could be saved to the country. On the signing of the armistice on November 11, 55 projects were abandoned, 14 projects were curtailed, and 20 only are proceeding as planned. The projects cancelled involved the expenditure of over \$17,000,000, at a loss of about \$4,000,000. The projects cancelled without loss involved about \$5,450,000, and the projects which were curtailed have been reduced in cost from \$17,000,000 odd to \$11,000,000. In addition, approximately \$20,000,000 worth of housing which was ready to submit to contractors was voluntarily abandoned by the U. S. Housing Corporation.

The contracts that are being proceeded with, therefore, represent the well-considered judgment of Mr. Eidlitz and his associates as to the projects that should be proceeded with and completed in view of peace-time needs.

It is now proposed, however, arbitrarily by Congress, without full information, or without complete knowledge of the facts, to discontinue all such projects, and halt them in midair irrespective of the state of their progress, unless they happen to be seventy-five per cent completed, or more.

It is very similar to a situation where a private individual has ordered a suit of clothes to be made for him. He finds that the coat is two-thirds finished, the vest is half completed, and the trousers are about one-quarter done. He thereupon tells the tailor that he has changed his mind and doesn't want the suit, and to stop all work on it, with the idea that the tailor can sell the suit in that uncompleted form for what he can get for it. The absurdity of this kind of arrangement is at once obvious. The market for uncompleted buildings is not much better than it would be for uncompleted suits of clothes. The practical thing, of course, for the government to do is to complete those projects which should be completed, and then dispose of them under a well-considered plan upon such lines as may be worked out by the U.S. Housing Corporation officials and by Congress.

To arbitrarily stop these projects in midair without consideration of the loss involved to the community, the interference with the contracts for the installation of public utilities, such as water, gas, lighting, and sewers, etc., is reckless, to say the least.

America the Melting-Pot of Architectural Styles

THERE is a question that arises just now in connection with the fact that several hundred thousand Americans (our army) have had their vision and knowledge considerably enlarged by their acquaintance with foreign war lands.

Not least of the things these Americans will come to appreciate will be the architecture that they see there. What will be the influence, then, after the war, on American architecture, when tens of thousands of these men, returned to their own country, in years to come become clients and "prospects"? It is obvious that the favorable impressions of European architecture will be reflected in a desire for something similar, or in the same spirit, in this country. These clients of the future, not to speak of returned architects, draftsmen, and others, will largely inject a new influence into American architectural development.

Already the "melting-pot" of world races, this country will become even more than it already is, the melting-pot of architectural styles. The chief difference in the influence will probably be that the new desires will be along simpler, domestic lines; for these soldiers will not be making

the "grand tour," and will be in more intimate contact with the real architecture of the French people, say, instead of, as the wealthy tourist and student formerly was, in contact with the grand and monumental works of architecture, mainly. This means a cessation of monumental treatment of ordinary American architecture and the coming in of simpler, severer, more natural solutions of problems.

All in all, another decade will witness some radical differences in the direction of American architecture, due entirely and solely to the war, not only in waste-prevention, construction methods, ethics of practice, construction management, planning, and general raising of efficiency due to war lessons, but in that intangible something called style—an art spirit entirely unlike anything that has gone before, just as the American race is itself a different race from all others, yet combining the characteristics of them all.

An attribute of genius is said to be the ability to assimilate the ideas of others, fuse, cohere, recombine, and issue them forth added to, improved, unified and perfected. And one prominent New Orleans architect maintains that the American architect exhibits this trait of greatness—the ability to "swipe" essentials and to so recombine them as to result in a product greater than the sum of the originals. Hitherto this "swiping" has been confined to monumental works of the past, but it is probable that the era now being ushered in will see this first phase influenced by an infusion of the lesser works of domestic architecture visible in Europe, and the result will be worth waiting for.

From "Building Review," New Orleans.

Examinations for Architects in the State of New York

THERE will be two opportunities during 1919 for architects to be admitted to practice in New York State by examination. Examinations held in various cities will be open to candidates who shall have previously qualified, on January 29–February 1, and on June 1–3. Candidates should write at once for information to the Examinations Division, Education Building, Albany, New York. Those who wish to take the examinations will be required by the Regents to qualify under the law which specifies that the applicant shall have "satisfactorily completed the course in high school approved by the Regents of the university, or the equivalent thereof, and subsequent thereto of having satisfactorily completed such course in mathematics, history, and one modern language, as are included in the first two years in an institution approved by the Regents, conferring the degree of Bachelor of Arts. Such candidates shall in addition submit satisfactory evidence of at least five years' practical experience in the office or offices of a reputable architect or architects, commencing after the completion of the high-school course. . . ."

Candidates may obtain copies of the Registration Law and an outline of the examination by addressing Dr. A. S. Downing, Assistant Commissioner for Higher Education, Education Building, Albany, New York.

Architects who have graduated from certain schools of architecture, and those who have practised ten (10) years in other States, may secure certificates of registration without examination. It is illegal for any one to use the title "architect" in this State without registration unless he actually practised architecture in New York previous to April 28, 1915.

THE BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS.

D. EVERETT WAID, *President.*

WM. P. BANNISTER, *Secretary.*

Education Building, Albany, N. Y.



DETAIL IN ENTRANCE LOBBY, BUSH TERMINAL SALES BUILDING, WEST 42^D ST., NEW YORK. Helmle & Corbett, Architects.



ENTRANCE LOBBY, BUSH TERMINAL SALES BUILDING, WEST 42D ST., NEW YORK.

Helmle & Corbett, Architects.



MAIN RECEPTION-ROOM.



BUSINESS LIBRARY.

BUSH TERMINAL SALES BUILDING, WEST 42D ST., NEW YORK.

Helmle & Corbett, Architects.



Helmle & Corbett, Architects.

STAIRCASE CONNECTING FIRST AND SECOND FLOORS, BUSH TERMINAL SALES BUILDING, WEST 42d ST., NEW YORK.



Helmle & Corbett, Architects.

INTERNATIONAL BUYERS' CLUB, SECOND FLOOR, BUSH TERMINAL SALES BUILDING, WEST 42^d ST., NEW YORK.



MERCHANTS' CLUB, BUSH TERMINAL SALES BUILDING, WEST 42^D ST., NEW YORK.

Helmle & Corbett, Architects.



MERCHANTS' CLUB, BUSH TERMINAL SALES BUILDING, WEST 42^D ST., NEW YORK.

Helmle & Corbett, Architects.

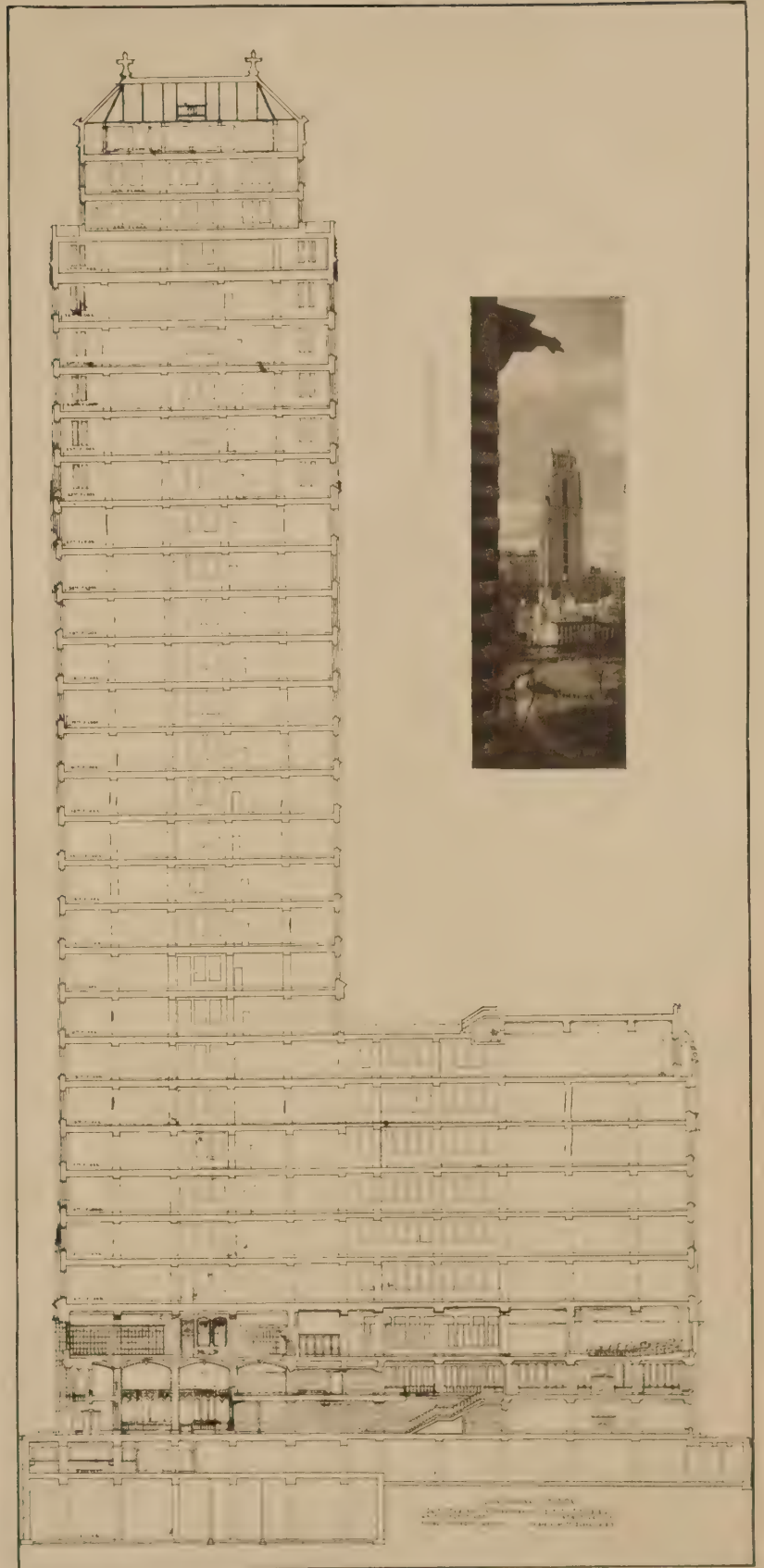


FIREPLACE, MERCHANTS' CLUB, BUSH TERMINAL SALES BUILDING, WEST 42d ST., NEW YORK.

Helmle & Corbett, Architects.



PERSPECTIVE.



LONGITUDINAL SECTION.

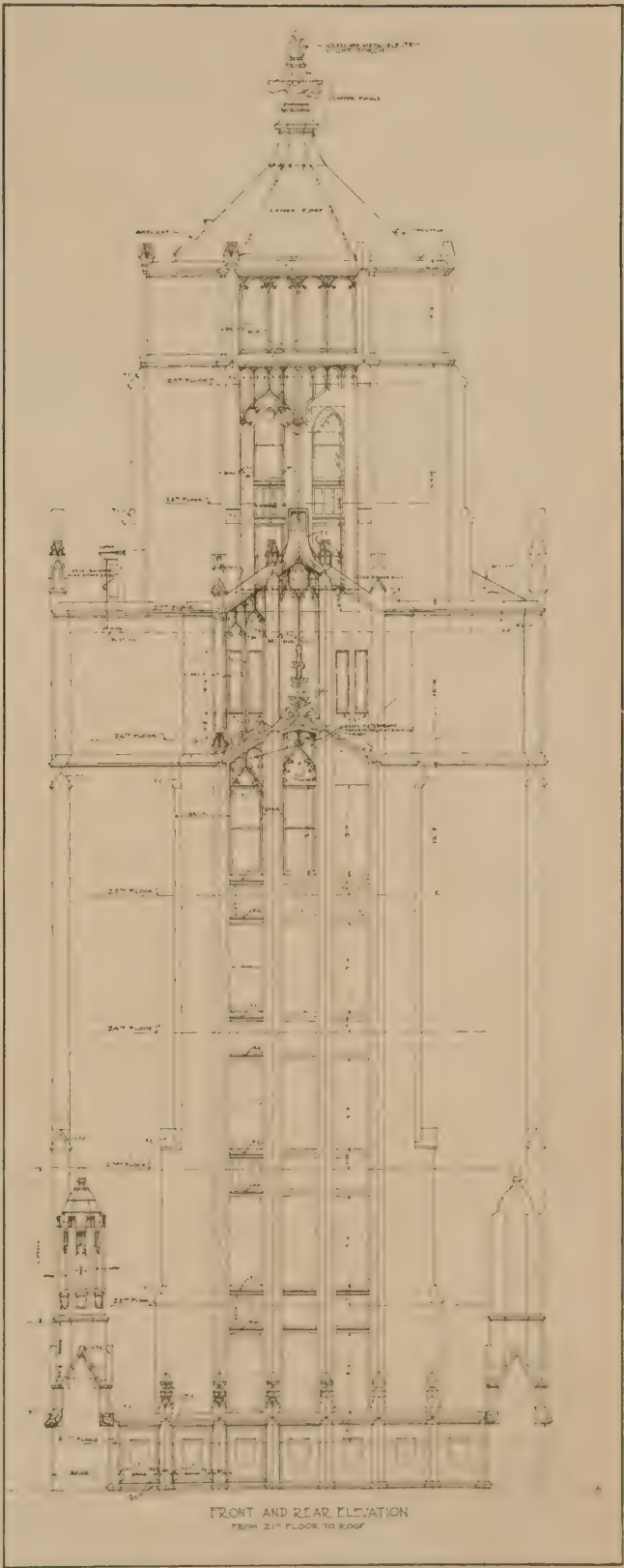
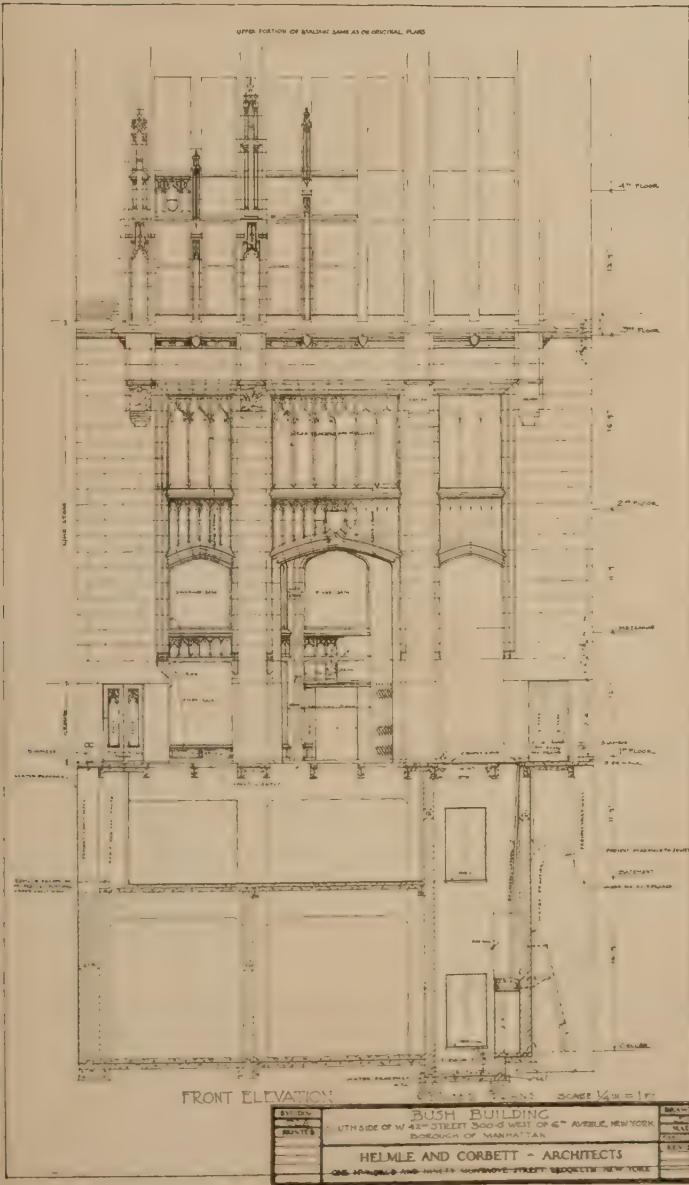


Helmle & Corbett, Architects.

BUSH TERMINAL SALES BUILDING, WEST 42d ST., NEW YORK.



IN CONSTRUCTION.





ARCADE AROUND PLAZA.

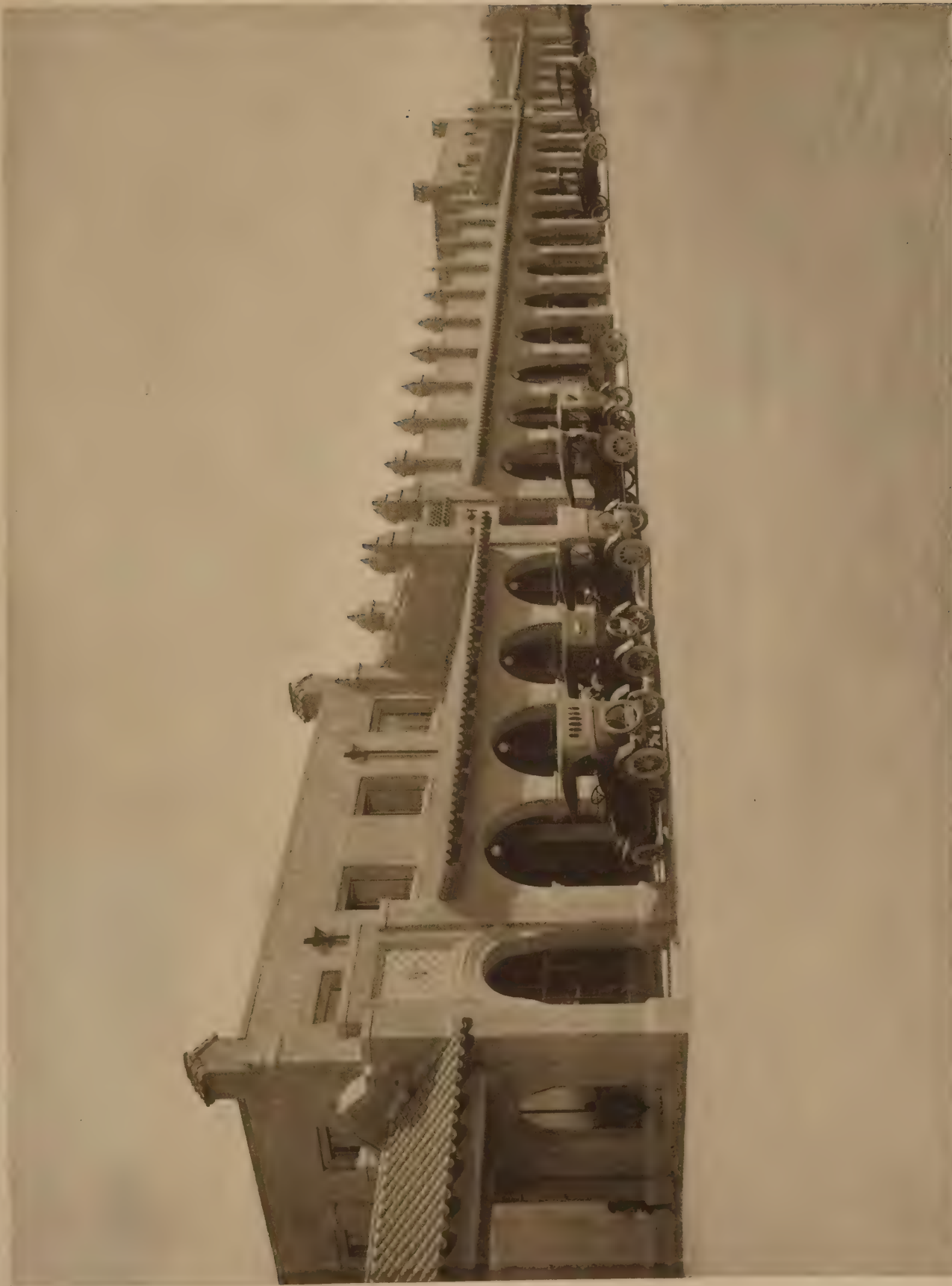






RAILROAD DEPOT, TOWN SITE, NEW CORNELIA COPPER CO., AJO, ARIZONA.

Wm. M. Kenyon, Maurice F. Maine, Architects.



STORE BLOCK, TOWN SITE, NEW CORNELIA COPPER CO., AJO, ARIZONA.

Wm. M. Kenyon, Maurice F. Maine, Architects.



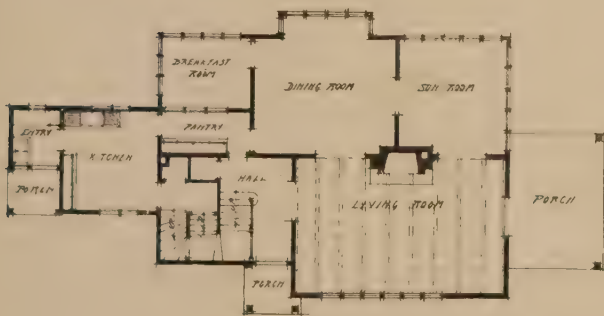
HOSPITAL WITH HOUSES, TOWN SITE, NEW CORNELIA COPPER CO., AJO, ARIZONA.

Wm. M. Kenyon, Maurice F. Maine, Architects.

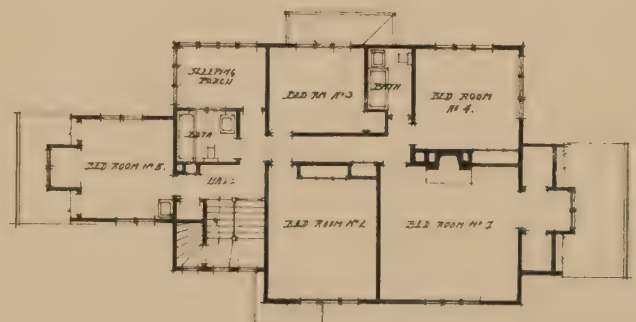


GENERAL OFFICE BUILDING, TOWN SITE, NEW CORNELIA COPPER CO., AJO, ARIZONA.

Wm. M. Kenyon, Maurice F. Maine, Architects.



FIRST FLOOR PLAN.
HOUSE #7.



SECOND FLOOR PLAN
HOUSE #7.

A Million Homes Needed by Our Allies

United States Will Supply the Necessary Building Materials

BELGIUM, England, and France are about to call upon the United States to supply building material and equipment for at least 1,000,000 houses, according to William C. Redfield, Secretary of the Department of Commerce. This fact, with disclosures concerning the domestic building situation made to recent trade conventions, has brought the American building investor face to face with a rather serious condition. The problem centres chiefly on the question of building material demand and the capacity of American manufacturers to meet an unprecedented domestic call for construction material, and at the same time take care of the imperative requirements of other parts of the world.

A computation of the probable amount of new construction is being made at present, and it is already evident, from figures at hand, that there is approximately twice as much building construction in project in this country to-day as in the best previous years ever recorded. No consideration is given to the building demands of South America and Canada, where American cement is already supplanting the German brands that formerly were almost exclusively used.

The building investor is face to face with an alternative of either taking what material he can get at existing prices or deferring his operation until prices come down. If he proceeds he will have to pay high prices, but also will have a demand for the finished building. If he waits he may find prices lower, but the demand will not be there. Foreign building material demand, as far as Europe is concerned, probably will be only of a year's duration, but that of South America will be of a permanent character. The demand for construction material in the United States cannot be

met, even with present plans in project, short of two years, based solely upon normal demands. This demand now has expanded from domestic to world proportions. The estimate does not include speculative construction of any kind.

The price situation, as it pertains to domestic building materials, is developing without regard to organized control so far as can be discovered by a rigid investigation into the price markets. The mason material dealers are taking the almost unheard-of attitude of counselling against anything like arbitrary price advances. In fact, a Federal department is watching carefully for any evidence of price advances that have no foundation for the movement. For that reason, while no fixed Government quotation has been made in certain important basic building commodities, the Government is holding a potential control over any commodity that shows signs of stampeding. The Government looks to the building and allied industries to absorb much of the returning soldier and naval labor, and the intimation is plainly made in some channels that it intends to see that its plans are not upset by any price manipulation that will frighten off the prospective building investor.

Prospective builders will find it to their advantage to consider fundamentals in determining to defer construction. It took ten years for building material prices to find their normal level, with a few exceptions, following the Civil War. The construction programme of the country then was only sectional, whereas to-day it is world-wide and far beyond the capacity of present American building material manufacturers to supply it when it gets into full stride. Prices of practically every building commodity are remarkably steady.

From the "New York Sun."

Money and Building—Present Developments—Future Prospects

BEFORE building money will be freely had for projected construction the building material manufacturer and dealer, laborer, and equipment supply interests must show that prices of all commodities have been brought to a stage of stability.

In the absence of such assurance lenders are cautious, not because they fear their ability to compete with structures built before the war, but because they are wary of a condition where excessive demand for building materials to-day, when the quantity available is below normal, might result in such a stampede of prices, labor costs, etc., as to effectively prohibit construction.

Walter Stabler, Comptroller of the Metropolitan Life Insurance Company, New York, probably the most dominant of institutions lending money on building construction throughout the country, analyzes the attitude of the average investor in respect to the current trend of building costs and the unquestioned demand for new buildings in this way:

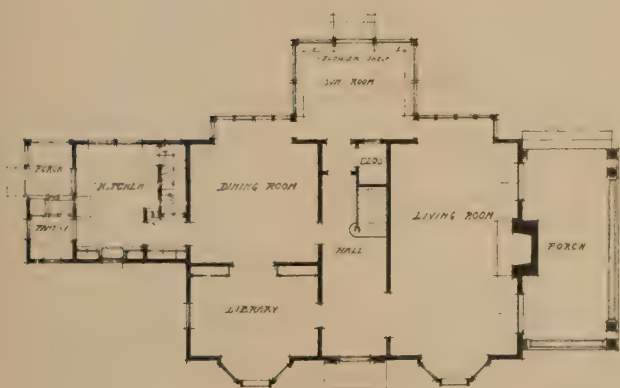
"At no time has the present condition of the mortgage market been even approximated, nor have the present real-estate conditions ever before existed. The whole country reports rentals as higher in most cases than ever, and no vacancies of moment in either business or residence proper-

ties; and while expenses for taxes, coal, and labor are much higher than usual, the net returns are better and generally satisfactory. Places for residence are scarce, and in many cities great congestion has resulted. There is, therefore, a strong demand for new buildings of all kinds, particularly for residence purposes.

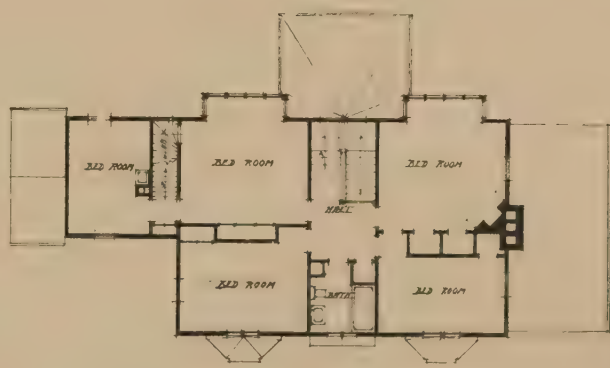
"The volume of construction now moving consists entirely of the most urgently needed commercial and industrial building work. One large concrete construction company, handling millions of dollars' worth of government work, recently made a survey of a New England town visited by a great fire, and developed only one insignificant contract, that one being for an industrial concern. Owners said they would not go ahead and rebuild until there was some sign of a general stabilizing of building prices. The owners' attitude is typical of all parts of the country, that, although there is a demand for more rentable space of a speculative nature, they would defer work until they had assurances from material, equipment, and labor interests that they had a stabilized market to deal with.

"In the interim there is about a 20 per cent of normal building market developing along the Atlantic seaboard

(Continued on page 16)



FIRST FLOOR PLAN



SECOND FLOOR PLAN

from Baltimore to Boston. In the absence of, or the extreme high prices of, one material, architects are turning to another. The stone interests, hearing of the stiffening price of common brick, for instance, have been rushing great quantities of this material to large distributing centres like New York, Boston, and Philadelphia, and to-day there is immediately available 2,000,000 feet of Indiana limestone deliverable to job at prices barely above those ruling before the war, according to the Dow Service Daily Building Reports.

"Where there has been a tendency to boost yellow-pine prices enterprising Pacific Coast Douglas fir interests have brought 20,000,000 feet of this material to this market for immediate delivery at low levels. The glass manufacturers are about to grant a 25 to 30 per cent advance to workmen, but under this plan they will not employ more men than were

employed last year, so that production in this department will be only 50 per cent of normal, but prices will be stabilized. To further help in stabilizing prices announcement will be made next week of the merger of two of the great crushed-stone interests of this district.

"Judged by the last two years of construction a very generous building market is developing among that type of construction that can be financed entirely by private funds. This includes business, commercial, and industrial work, and it will be sufficient to give every one a fair share of construction. The peak of the building movement cannot be expected until the summer of 1920, and under the present financial and construction controlling influences, it is entirely beyond the power of individual or corporate manipulation to advance it."

Announcements

Major Charles H. Higgins, Ordnance Department, U. S. Army, is honorably discharged from the service of the United States and has returned to the practice of his profession with his firm of Delano & Aldrich and Charles H. Higgins, architects and engineers.

William H. Gompert of 171 Madison Avenue, New York, wishes to announce that Mr. Lauritz Lauritzen has become associated with his office. Mr. Gompert is known as the architect of the Pullman Building on Madison Square, the Cuyler Building, and other important office buildings.

Dwight P. Robinson & Company, constructing and consulting engineers, announce that they think the cost plus fee basis is the most satisfactory one for architects. The new buildings of the Massachusetts Institute of Technology, of which Mr. William Wells Bosworth was the architect, were built on this basis.

The Portland Cement Association announces the appointment of Wm. M. Kinney as General Manager to succeed H. E. Hilts, resigned.

He is an associate member of the American Society of Civil Engineers and American Railway Engineering Association, a member of the American Society for Testing Materials, American Concrete Institute, Western Society of Engineers, Engineers' Club of New York, Engineers' Club of Philadelphia, and Chicago Engineers' Club. He has been particularly active in the work of the American Society for Testing Materials, being vice-chairman of Committee C-1 on Cement and a member of the Executive Committee. He is a member of the Executive Committee and Secretary of the Committee on Concrete Roads and Pavements of the American Concrete Institute.

Marshak & Hickey, architects, announce the opening of their offices, 310 Strand Building, Providence, R. I., to resume the practice of architecture, and would be pleased to offer their services in the designing, planning, and supervision of residences, office buildings, schools, churches, etc. Advice and consultation without charge.

B. H. & C. N. Whinston, architects, announce that they are now located in their new offices in the American Circle Building at 2 Columbus Circle, New York.

Blaney & Blaney, formerly at 6 Beacon Street, Boston, wish to announce that they have reopened their office for the practice of landscape architecture and town planning in the Brattle Building, Harvard Square, Cambridge, Massachusetts. Both members of the firm have been in the army.

I have transferred my drafting-room and library to the spacious Jackson Park Studio, at 1544 East 57th Street, Telephone Blackstone 5307, and retain my business conference office with an extensive exhibit of building and decorating materials at 175 West Jackson Boulevard, Telephone Wabash 2020, with personal hours from two to five P. M.

HENRY K. HOLSMAN, A. I. A., Architect, Chicago.

The Manufacture of Pressed Steel Parts

In recent years the manufacture of deep-drawn, heavy stamping and pressed steel parts has increased tremendously. Many articles previously made of cast or malleable iron are now successfully formed from steel, the result being a more satisfactory and durable part in most instances. Among the leading concerns in this business is the Truscon Steel Co., of Youngstown, Ohio. They have been manufacturing pressed steel parts for a number of years, the majority of such work being for use in their own products. Their products to-day practically cover the entire field of structural building materials.

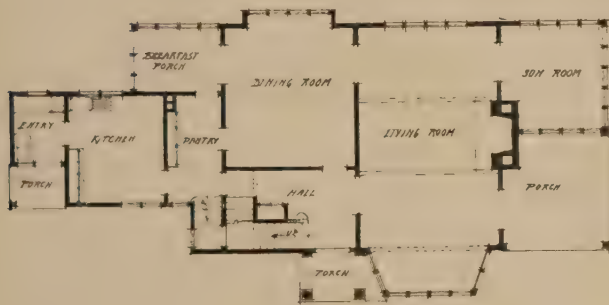
Bank and Public Holidays Throughout the World

The Guaranty Trust Company of New York has prepared for the year 1919 a new and enlarged edition of the book issued a year ago on "Bank and Public Holidays Throughout the World." That book embodied what is believed to have been the first attempt to compile a complete list of the holidays of all nations, and was prepared especially for bankers, merchants, and manufacturers engaged in international trade. It is now in use everywhere by those whose business involves the making of payments and collections in other countries, and has come to be recognized as an authority.

This book is not for sale, but is printed as part of the service which the Guaranty Trust Company of New York provides for its customers and others.



OFFICER'S RESIDENCE.



FIRST FLOOR PLAN
HOUSE NO. 6



SECOND FLOOR PLAN
HOUSE NO. 6

Why Not a Ministry of Fine Arts for the United States?

NOT long before the war began we seconded a movement—which we had often suggested before—for the establishment of a Ministry of Fine Arts. It was supported at the time by many artists of all grades and aptitudes. It was urged in these columns, and elsewhere, that our past efforts to make Art a real national asset had, to put it mildly, not been very successful—at any rate, as far as Government initiative had been vouchsafed. It was shown that the Department to which the organization of such aid as had been conceded had been intrusted, had for the most part quite mistaken its mission; and that the result so far had, perhaps not unnaturally, aroused a distrust in Parliament, and probably outside of it, of any further additions to the long list of well-housed, well-paid officials, whose zeal, when manifested, had been kindled by no special knowledge of or enthusiasm for the cause of which they had been created the administrators, and whose exertions were apparently paralyzed by the old taint of circumlocution.

As the war drifted along, and Lord Kitchener's death deprived us of his priceless capacity for organization, and Mr. Asquith's resignation was followed by Mr. Lloyd George's accession to the Premiership, it became evident that, for good or evil, the old principle of Ministerial responsibility to Parliament had gone by the board, and that henceforth we were to be governed by "Ministers" chosen by nobody knows who, unrecognized as heretofore by election to the House of Commons by the vote of the people, and, apparently, answerable to nobody for failure and, as events proved in most cases, of little use. The one "Ministry" that has yet to justify its existence or follow most of the others into the limbo of lost activities is that of Reconstruction. That, so some say, is to reorganize everything, and inaugurate the great new era of prosperity which is to purify and elevate industry. As yet, it is discouraging to note that there is not the slightest sign of recognition that no scheme of reconstruction can possibly be worth twopence to the nation which leaves Art out of its purview, and denies to artists any voice in its inception or operation. Nor is there any general conviction that it may do more harm than the calamities war has inflicted on us. Few seem aware that every industry, from agriculture down to the least useful calling, must be either an organized art or a demoralizing fraud. Fewer still are alive to the fact that in the economic struggle which will follow peace Art must lead, representing as she does the most solid and enduring capital which can be utilized for really national service.

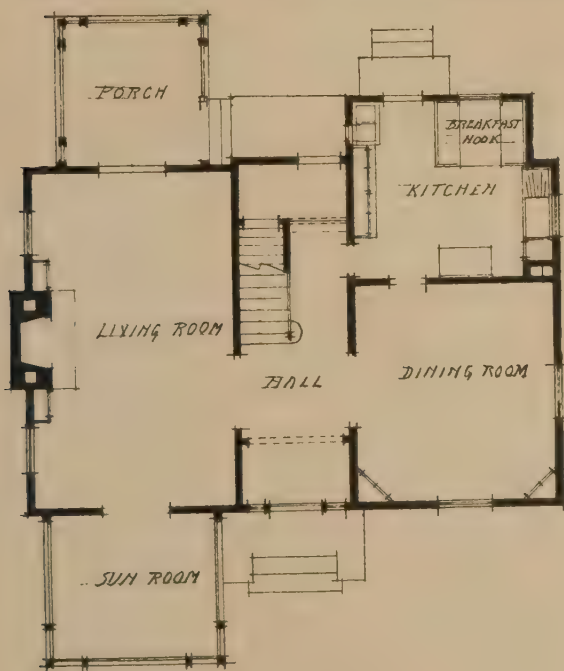
As usual, our French Allies, who knew this long ago, and have profited by the knowledge, are already far in front of us in the work already set going for the broadening of the facilities they already possess, thanks to the numerous societies founded since 1851, when, as one result of the Great Exhibition here, the Union Centrale des Beaux-Arts Appliqués à l'Industrie was founded. In 1874 this society amalgamated with a new body for the creation of a museum of decorative art, and the two became the Union Centrale des Arts Décoratifs, whose work has been the organization of the Museum of Decorative Art in the Pavillon de Marsau. In 1889, the year after the foundation of our own Arts and Crafts Society, arose the Société d'Encouragement à l'Art et l'Industrie. This body was instrumental in securing the recognition of the claims of decorative art in exhibitions at home and abroad, it organized ambulatory exhibitions,

established scholarships for apprentices, arranged competitions for the students of the various schools of decorative art, and did much to induce manufacturers to invite the co-operation of students and professional artists in their productions. Later on, in 1904, another society, called the Société des Artistes Décorateurs, was founded, whose aim was the organization of exhibitions of schemes and projects of interior decoration and furnishing. Then came the Union Provinciale des Arts Décoratifs, founded for the purpose of reviving regional arts and industries throughout the country.

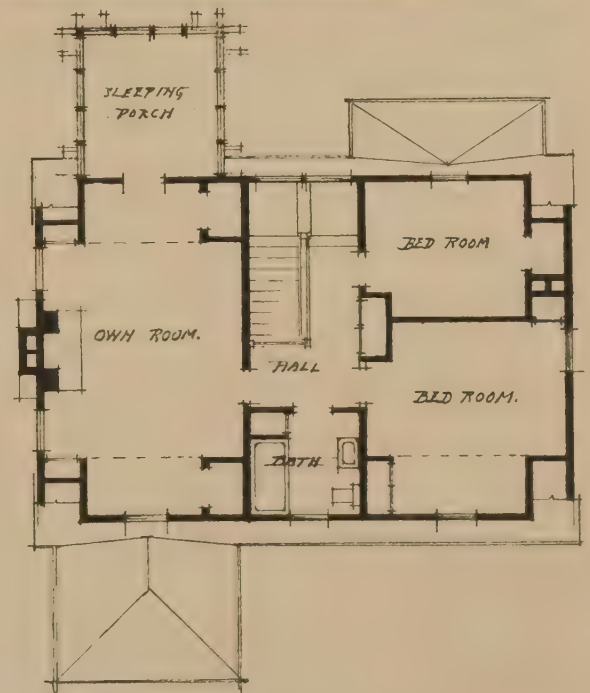
The French Ministry of Fine Arts promptly recognized the value of these organizations, and others—such as the Comité Central des Arts Appliqués and the Comités Régionaux d'Art Appliqué. At the inaugural meetings of the two last mentioned in July last year M. Dalimier expressly indicated that the new Regional Committees are to study all questions relating to the preparation of artistic craftsmen for their tasks, to suggest necessary reforms in artistic and general education, to interest themselves in the work and progress of students and apprentices in the district with which each committee is concerned, to give continual support and encouragement to the principals and teachers of schools in their experiments and researches, and generally to keep the Ministry of Fine Arts constantly informed as to the needs of the district and to report progress. The Central Committee, it should be added, comprises two members of the Senate, two members of the Chamber of Deputies, a delegate from the Paris Chamber of Commerce, representatives of the three great *salons*, delegates from the four great art and craft societies, twelve representatives of the chief artistic industries and of the great trade houses in Paris.

As regards ourselves, it will be at once admitted that we have no present institution of the kind to which, as they exist, any Minister is likely to intrust such preponderating influence as Art must have in any real scheme of reconstruction. Some good work has been done by the Art Workers Guild and the Arts and Crafts Society, but it is not comparable for a moment with that which has been done in France, nor is that which made the Arts and Crafts Exhibition at the Royal Academy last spring such a failure. But there is no lack of individual ability. It is true the movement inspired by men like Ruskin, Morris, and Crane has for the time languished, but there are others still with us who know at any rate what we lack, and that till we find it our industries will degenerate if anything they produce is conceived or produced without the help of Art. The first step any real Minister of the Fine Arts would take would be to follow M. Dalimier, who instituted a number of committees of inquiry throughout the Departments appointed to inquire into the causes of the failure or decadence of certain industries. These committees were unanimous in declaring, first, that the artistic education of the French workman is inadequate, and, second, that the need for the re-establishment of the apprenticeship system was universally recognized. They recommend that it shall be made obligatory on the master to send his apprentices in his own time to study at the appropriate trade or craft school, and that it shall be equally obligatory on the apprentices to attend. These recommendations have had one immediate practical result. The Senate has already made these two obligations, in the case of trades and trade

(Continued on page 20)



FIRST FLOOR PLAN.



SECOND FLOOR PLAN.

HOUSE AND PLANS, P. BARTON MYERS, DAYTON, OHIO.

Louis Lott, Architect.

schools, the subject of a decree. The same procedure is about to be followed, according to M. Dalimier, in the case of the crafts and artistic industries, and will apply to all craft schools and schools of decorative art.

The next indispensable act of any such Minister should be to take order that our workshops should be better planned, and made healthier and workable in, without injury to the *moral* of the workers. Concurrently should follow every encouragement of a great increase of small workshops, and the formation of craft and industrial villages. From the one-man workshop, working on right lines, and amid favorable associations, as from the small inventor, come the ideas and impulses on which the large establishments depend. Some of the small men will still flock to the factory. More, we trust, will cling to the freedom and independence which are the life-springs of Art. In such small undertakings many of our returned soldiers and sailors will find congenial means of securing a livelihood, instead of ornamenting the doors of shops and kindred buildings as porters.

We Are Going to Build and Build and Build, Says Willis Polk

NOW that the frosts of war that drove the building industries into hibernation have been dispelled by the grateful warmth of the armistice, the dormant Bear of investment finance stirs in its slumbers, rubs its eyes, and prepares to seek whom it may devour! But dazed from its long inactivity, emaciated from its enforced fast, it is cautious. It is like the architects, and the architects are like the twenty cats camped around one tiny knot-hole from which one timid little mouse exposes one bristly little whisker. So queries Mr. Investment Finance: Can we build now? What about capital issues? What about priorities? What about the next Liberty Loan? What about the high cost of labor? What about the high price of material? Still the spring thaw that releases the stored-up snows of winter, with its resultant freshets, will wash away all obstacles to progress.

Shall we wisely impound and direct this flood, or shall we permit its uncontrolled flow to wreak destruction equal to or greater than the devastation of war? Therefore, Mr. Capital Investment, Mr. Labor, and Mr. Materialman, harken unto my voice! Sit thou at my feet and learn wisdom! Labor will never be cheaper. My father, after the Civil War, was glad to cut, haul, and pile good oak cord-wood for one dollar a cord. I guess we are glad to pay twenty dollars to-day.

Still we can buy a better elevator for less money to-day than we could ten years ago. We can buy a better automobile for less money to-day than we could five years ago.

We can build a better building for less money to-day than we could twenty years ago.

Twenty years ago more steel was put into the foundation of the Claus Spreckels Building in the form of grillage than was recently put into the entire Hobart Building from base to roof. We didn't know better then; we know better now. We can do better things now for less money than we could then. James Phelan, it is said, traded a band of mules for the lot upon which the Phelan Building stands to-day. What are we going to trade for the opportunities of this moment?

We are going to build and build and build, wages and prices to the contrary notwithstanding. The sleeping giant

As yet there is no sign that the Minister of Reconstruction perceives any such necessities as we have briefly indicated. If he had, he would ere now have taken counsel with the English artists and craftsmen, as M. Dalimier did with those of France, and enabled them, at the head of such an organization, to attempt what is being done there to head the task of national regeneration. If he is content to rely on the "Captains of Industry," who have piled up fortunes at the cost of the workers, or the Factory lords who have transformed the towns and country-side into labyrinths of standardized hovels, who have defaced and dishonored beauty, and given us ugliness and deformity in its stead, or on the still more fevered race for new markets for rubbish that no foreigner will buy, which is the primal cause of war, and all of which together are sapping the moral and physical health of the people, the prospect is indeed a hopeless one.

From "Building News," London.

stirs; the sleeping giant awakens. Look out when he sheds the superfluous hair from his shaggy fur! Stand aside, oh, timid ones, lest thou be devoured.

The late D. H. Burnham used quizzically to relate that H. H. Richardson held that an architect's first duty was to get a job. Then he would solemnly observe: "But Henry was wrong. An architect's first duty," he maintained, "was to *do* the job."

"But do it well," he would always add.

Why Not Put Theory into Practice in Our Architectural Schools?

NOW as to the course of training architects. Almost every college or university is continually planning some improvement on the campus or in planning new buildings. Why cannot all this work be performed by the junior and senior students in the architectural and engineering colleges under the direction of their professors? This is not only possible but absolutely feasible!

We have positive demonstration of this at the Tuskegee Institute for colored students now in Alabama! This, in my opinion, is the most practical school of architecture in the United States, and possibly in the world. It was left to Booker T. Washington to show us how! Here the student not only prepares the drawings but he actually lays the brick, pours the concrete, does carpenter work, plumbing, painting, plastering—in short, everything that enters into the building to make it complete. There are now in the neighborhood of some sixty buildings on the campus, and these buildings as a whole will compare very favorably in architecture and workmanship with most of our State university buildings. It follows that graduates of such schools are not only competent to intelligently design a building, but they are supplied with the necessary business knowledge which most of our graduates absolutely lack. Had such methods been in vogue in our universities we would have now more intelligent contractors and possibly less mediocre architects, who not only are a hindrance to themselves but to the whole profession at large.

Will our university directors consider this necessary change in their school curriculum?

James B. Dibelka, in the Bulletin of the Illinois Society of Architects.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

HOUSE AND PLANS, C. C. BLACKMORE, DAYTON, OHIO.

Louis Lott, Architect.

War Memorials

Suggestions for Their Treatment from The American Federation of Arts

IN response to requests for advice from different quarters, the following suggestions are offered to those who are considering the erection of war memorials:

(1) Consider the amount of money probably available. Conclusion on this point must necessarily precede any determination as to the form of memorial, and is equally important whether that form be some structure, architectural or sculptural, painting, or work of landscape art.

(2) Consider tentatively the form which the memorial should preferably take, whether architectural or sculptural, a painting, or some kind of landscape art.

(3) Also the question of site. This question is of vital importance. In large towns the memorial, if monumental, should not be so placed as to obstruct traffic and at the same time should be in a position sufficiently conspicuous to be worthy of its object. Existent buildings and other surroundings should be considered in deciding location. So should also the permanence of such buildings and surroundings. This is quite as important in the case of a small village as in a large town or city.

(4) Likewise in connection with any structure the question of material, whether stone, marble, or bronze. Local stone has advantages, both economically and sentimentally.

(5) The approaches to any memorial and the points of view from which it is seen are quite as important as its immediate surroundings.

(6) The cost of laying out the site, when necessary, should be included in the scheme. The effect of a memorial is often entirely lost by want of a careful laying out of the site.

(7) Where memorials are proposed for the interior of buildings, whether in sculpture, architecture, stained glass, mural paintings, or wall tablets, careful regard should be paid to the scale and character of the architecture of the building and to any adjacent monuments.

(8) The lettering of all inscriptions should be carefully studied and should be legible. A bold Roman type, or the Italian lettering of the sixteenth century based on it, is the type most suitable.

(9) In all memorials simplicity, scale, and proportion should be aimed at rather than profusion of detail or excessive costliness of material. It is the artistic, imaginative, and intellectual quality of the work that gives it its final value.

(10) Before the adoption of tentative plans, and preferably before any plans are made, secure expert advice. This can usually be best obtained by calling in a competent artist, be he an architect, a sculptor, a painter, or a landscape architect. If there is to be a competition, careful specifications setting forth the terms of the competition should precede it. It should be remembered that the ablest artists are not usually willing to enter competitions except for structures of the most important kind.

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Japanese Architects Our Guests

DURING the past month New York has been honored by the presence of three distinguished Japanese architects: Uheiji Nagano, Yutaka Heidaka, and Seichiro Chujo. The first-named is the president of the governing body of Japanese architects similar to the American Institute of Architects.

In the early part of their visit a dinner was given at the Nippon Club, to which a number of prominent New York architects were invited.

The New York Chapter A. I. A. gave a dinner on January 7 at which the visitors were the guests of honor.

They have now departed for the West.



HOUSE AND PLANS, W. B. PATTERSON, DAYTON, OHIO.

Louis Lott, Architect.

Legal Decisions of Interest to the Architect

These decisions are edited by Mr. John Simpson

LIQUIDATED DAMAGES FOR DELAY IN COMPLETION

A contract to wreck a building provided that the architect was empowered to certify an extension of time for completion if the contractor was delayed in starting the work. The owner did delay the beginning of the work. The contractor did not thereupon apply to the architect for an extension of time, and there was no waiver of the requirement. The New York Appellate Division holds that the owner's act in delaying the beginning of the work did not destroy the provision for liquidated damages for delay.—*Trants Realty Corp'n v. Casualty Co.*, 166 N. Y. Supp. 807.

ENFORCEMENT OF BUILDING RESTRICTIONS

The courts are slow to declare building restrictions burdens upon real property unless it clearly appears from the deeds of conveyance, not only that a general scheme of improvement is contemplated, but also, if a grantee of the original covenantee seeks to enforce the restriction, that it is not a mere personal covenant but passes with the land. The rule is that where the fee is passed to the covenantor, and no reversion is left in the covenantee, there is no privity of estate or tenure between the parties, and the burden of the covenant, though imposed upon the land conveyed, is solely for the personal benefit of the covenantee, not passing with the realty to his grantee.—*Breese vs. Dunn* (Cal.), 172 Pac. 387.

OWNER'S RIGHT TO COUNTERCLAIM FOR DEFECTIVE WORK

The Rhode Island Supreme Court holds that where a building contractor sued for the price of extras, including in the declaration all sums due him "under said contract," the defendant owner could recoup her damages for defective work, although the plaintiff sought to prove that the amounts sued for became due under such an alteration of the original contract as to constitute a new one. The court said that even if by a very strict and narrow construction it was held that the damages claimed by the defendant in recoupment grew out of the original contract, and that the plaintiff's claim for extras was a separate and additional contract, nevertheless it was obvious that both claims grew out of one and the same transaction, to wit, the building of the house. There was evidence that the owner paid the contractor the full contract price, believing that the contract was properly performed, but discovered later that there had been a breach. It is held that a charge to the jury that if she paid him the contract price under a "misapprehension" of fact she could recover her damages was not open to the objection that there was no evidence to support the use of the word "misapprehension," since there was testimony that after payment of the price the owner discovered that white lead and linseed oil were not used in the outside painting.—*Mr. Phillips vs. Durkin* (R. I.), 103 Atl. 929.

EXTRA WORK

The Washington Supreme Court holds that, under a contract providing that the plaintiff would do the plumbing work for a specified sum, and would furnish a list of materials required for "roughing in," this including all materials necessary to do the plumbing in accordance with the plans and

specifications, the contractor could not recover for extra work and materials required between "roughing in" and the setting of fixtures. The owner, it was held, would not be bound by a custom among plumbers to call extra work "roughing in" unless it clearly appeared that he contracted with reference to it.—*Donaldson vs. Brewster* (Wash.), 173 Pac. 1018.

LIABILITY OF CHARITABLE INSTITUTION FOR IMPROVEMENTS

In an action to foreclose a mechanic's lien for materials furnished for improvements on a building belonging to a charitable institution it appeared that at a former hearing of the case (95 Neb. 491, 145 U. W. 1023) it was held that the institution did not and could not, under its charter, enter into a valid contract for the payment of the claims of materialmen, the material having been furnished for the purpose of constructing a hospital. It was held that this previous holding constituted the law of the case to be adhered to, the evidence adduced remaining substantially the same. It was also held that, the institution having, because of the substantial benefit which it had received from the improvements, made provision for the raising of a fund for the payment of the value to it of such benefits received, the court would order the application of any such fund so raised to the payment of the cost of any benefits so received.—*Horton vs. Tabitha Home* (Neb.), 165 N. W. 2.

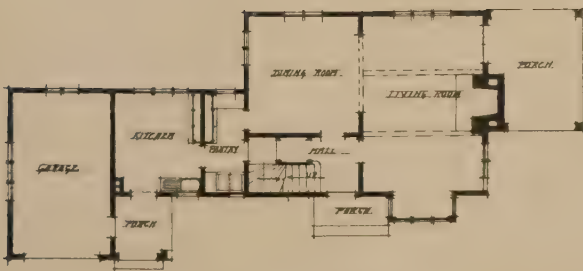
PENALTY FOR DELAY—"WORKING-DAYS"

In an action upon a building contract where the defense was that the building was not completed within the time specified it appeared that the contractor had agreed to complete the work within 55 days from the date of the contract. It was held that the term "working-days" excluded not only Sundays and holidays but also days on which no work could be done because of weather conditions, but included Saturday as one working-day, although the labor rules required suspension of work on Saturday afternoon. The contract provided for liquidated damages of \$100 per day for delay in completion. The value of the building was only \$60,000 to \$65,000, and the rental value \$6,500 per year. It was held that as the sum stipulated was disproportionate to actual damages, it was merely a penalty.—*Christopher vs. Simpson, Architectural Iron, etc., Co. vs. Steiningh Const. Co.* (Mo.), 205 S. W. 278.

MEASURE OF DAMAGES IN QUANTUM MERUIT ACTIONS

In a contractor's action in quantum meruit in the Missouri courts to recover an unpaid balance for the construction of a building the defendant urged that the plaintiff procured the material and labor at a less price than the proof showed the reasonable value to be, and therefore should not be entitled to more than he paid out, in this action. To illustrate: R. contracted the excavation work at \$2,600, and then did \$100 of extra work. He was paid \$2,700. He testified that the work he did was reasonably worth \$3,275, and that he lost \$500 to \$600 on the job. Other testimony was to like effect. This brought up the question what is the measure of recovery in cases of this kind. In Missouri there are two classes of cases in quantum meruit growing out of

Continued on page 26



FIRST FLOOR PLAN
HOUSE NO. 4



SECOND FLOOR PLAN
HOUSE NO. 4

No. 4. OFFICER'S HOUSE AND PLANS, NATIONAL CASH REGISTER CO., DAYTON, OHIO.

Louis Lott, Architect.

violated building contracts: (1) Cases where the contractor has breached the contract, and the owner has taken over and used the material and labor furnished by the contractor; and (2) where the owner has breached the contract, and the plaintiff has elected to sue in quantum meruit rather than on the contract.

The Missouri Supreme Court said: "There has been some loose writing in the Missouri cases as to the measure of recovery in these two classes of cases, but in Division I I have set out what I now assert to be the true rule in a case where the owner has breached the contract. . . . With a preciseness characteristic of the man, Rombauer, P. J., in *Kelly vs. Rowane*, 33 Mo. App., loc. cit., 443, thus summarizes the law: 'The law governing the rights of parties to building contracts in this State, although peculiar, is well settled. If a contractor is prevented by the unauthorized act of the owner from completing a building contract, he may recover in an action the reasonable value of his work and labor, regardless of the contract price, and is not restricted to a pro-rata share of the contract price. On the other hand, if he voluntarily abandons the contract, he may recover the actual value of the work and materials, not exceeding the contract price, less such damages as have resulted to the other contracting party from the breach of the contract.' That we have cases which say that the plaintiff (contractor), who has not breached his contract, suing in quantum meruit an owner who has breached his contract, cannot recover in excess of the contract rate, there is no doubt; but to my mind these cases overlook the real distinction. Where the contractor breached the contract, and then sues for material and labor in quantum meruit, it is proper to limit his recovery so as to keep the finished structure within the contract price. This because his breach of the contract does not destroy the owner's rights under the contract. By breaching the contract he cannot take from the owner the rights reserved in the contract, but the owner in the quantum meruit action can at least assert the contract to the extent of fixing values and damages. . . . But in a case where the owner violates or breaches the contract, we universally say the plaintiff can elect to sue in quantum meruit rather than for damages on the contract. If he does so sue, the special contract performs no function in that suit. The defendant cannot undertake to limit the recovery by the terms of the contract, because he has breached the contract. To permit him to use his breached contract to limit a recovery against him would be to pay to him a premium for his own wrong. The law does not contemplate such. The apparent conflict in our cases grows out of an oversight in considering this vital difference between the two classes of quantum-meruit actions growing out of breached builders' contracts. To my mind it is not consistent with good reason to hold that an owner who has breached his contract can yet use that contract to limit the amount of recovery in a quantum-meruit action for labor and material which he appropriated at the time he breached the contract."

VIOLATION OF BUILDING RESTRICTIONS

Building restrictions on 28 lots, comprising part of a general improvement scheme, were violated by the owners of 7 of the lots. In a suit against another owner for alleged violation of the restrictions the infraction complained of was merely the erection of a house with one side and a projecting chimney too close to the side line, and did not dimin-

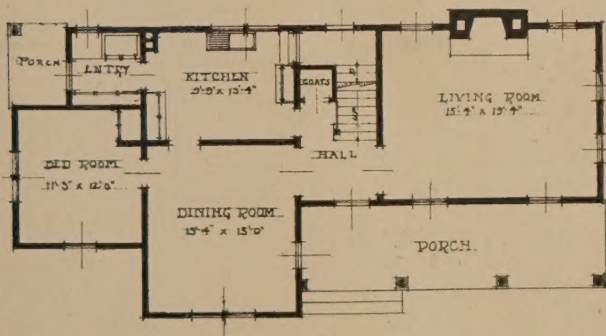
ish the value of the other properties. The enforcement of the restriction would not tend materially to restore to the district the character impressed upon it by the general scheme. The California Supreme Court held that the restriction would not be enforced by injunction.—*Bryant vs. Whitney*, 174 Pac. 32.

COMPLETION OF WORK BY OWNER—NOTICE TO CONTRACTOR

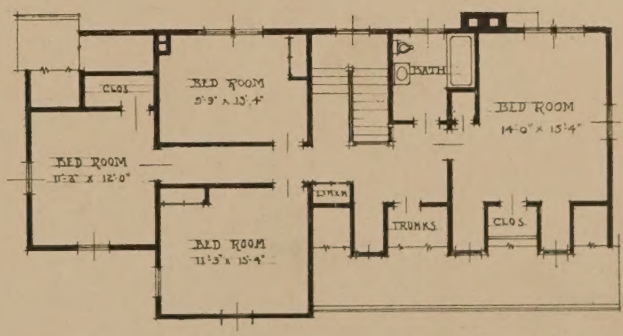
A building contract contained a provision that, should the contractor refuse or neglect to supply a sufficiency of materials or workmen, the owner should have the power to provide these, after three days' notice in writing, to finish the work, and the reasonable expense thereof should be deducted from the contract price. The contractor abandoned the work, which was completed by the owner. In an action by the latter on the contractor's bond, there was testimony that the architects, at the time of abandonment, served upon the contractor a written notice, notifying him to finish the building, in the form of a stipulation between the architects and the contractor, setting forth certain items of work which must be done before the architects would accept the building. The stipulation then stated: "If the hereinbefore mentioned items are not finished within three days, then the said architects shall have the privilege of completing the same, paying the necessary expenses thereof." A copy of this, signed by the contractor, was retained by the architects and produced in evidence. The copy retained by the contractor was not signed. It was held that although the latter copy was not signed by the owner, it was given by his authority and was accepted by the contractor as the equivalent of a signed notice, and as being in fact a notice in writing. The sureties were therefore not released by the owner's taking possession and finishing the work.—*Cohn vs. Smith* (Cal.), 174 Pac. 682.

RESTRICTIVE COVENANTS—"FRONT FOUNDATION WALL"

The New Jersey Court of Chancery holds that, while a restrictive covenant against building on a lot unless the "front foundation wall" be at least 75 feet from the street was not violated by a porch within the 75-foot distance, it was violated by the alteration of the porch to erect a second story thereon, forming substantially an addition to the main building, although piers supporting the double-decked structure were not technically a foundation wall. The term "front foundation wall" does not necessarily imply a solid wall, but includes anything which serves the purpose of a foundation wall. The court said that the clear purpose of such a restrictive covenant is to prevent the erection of something which can be sensed by one of the senses. When the grantor used the language "foundation wall," he had primarily in mind, not the masonry forming the foundation, but the structure superimposed, or a structure ordinarily superimposed upon a foundation wall which would appeal to the sense of sight of a neighbor. To hold that a person under the terms of such a covenant may erect a main structure, which would ordinarily rest upon a foundation wall, and be within the terms of the covenant, without a foundation wall technically speaking, and be within the terms of the covenant, would render the language of the restrictive covenant meaningless.—*Marsh vs. Marsh* (N. J.), 104 Atl. 373.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

TENANT'S HOUSE AND PLANS FOR JOHN H. PATTERSON, DAYTON, OHIO.

Louis Lott, Architect.

The Present Cost of Building

"Forward, March!" Says Willis Polk

THE immutable God-made laws of competition always control the economic world, and no end of man-made laws ever results in more than a temporary ripple on the placid surface of things as they are. For example: Is the present cost of building prohibitive? Would it be wise upon the part of investors to defer improvement at this time with any certainty that they will, during the ensuing conditions, profit rather than lose by such deferment? A safe estimate of future conditions may always be wisely prognosticated by a careful analysis of the past. For example, vain hopes often encourage the anticipation of things unattainable, as the farmer's son said to the butcher: "Pop told me to ask forty dollars for this here heifer, but if I couldn't get forty to take thirty." Now, shall we encourage ourselves in a penny-wise, pound-foolish policy of waiting, or shall we be bold and courageous, improve our properties, post up our net income upon capital investment at 6 per cent net on the money, or shall we let the property remain idle at minus zero? Personally, I do not feel either qualified or competent to set myself up as a prophet in this very serious question. I can do nothing more than to express my personal opinions and beliefs. I remember the day when Thanksgiving turkeys sold at seven and one-half and eight cents per pound; only recently I cheerfully paid my local retailer thirty-eight cents per pound for a turkey. I remember the day when the honest laborer, worthy of his hire, contentedly worked and slaved industriously ten, eleven, and twelve hours a day for a dollar and a quarter. I remember when, in 1891, the Mills Building in San Francisco, celebrated as one of the pioneer modern office-buildings of the world, and to-day still one of the best, cost at that time, when labor for ten hours received the average wage of a dollar and a quarter and mechanics for nine hours received the average wage of three dollars, cost forty cents per cubic foot. In the reconstruction of and addition to this same building, following the earthquake and fire which destroyed our beautiful city, and during a period of apparently excessive costs and high wages, with labor working eight hours per day at an average wage of two dollars and a half and mechanics working eight hours a day at an average wage of six dollars, the cost with improved methods was but thirty-three cents per cubic foot. Of course there are always fluctuations in local values, but I seriously believe that the big man can exact compensation from the morrow for his losses of to-day. It is only the small man, in the hope that he can make some gain by delay, who permits valuable property to remain idle one moment. There are many notable instances within the confines of our fair city illustrating the point in question, to wit: many of our vacant lots. Of course these casual observations of mine should be taken with a grain of salt. I am in the building business. It is to my interest to encourage building.

But in any event, as a last resource, doubting Thomases who desire to ignore the adage that "He who hesitates is lost" might find consolation in this note on preparedness: Would it not now be advisable for such persons to proceed with the development of any plans that might be required for prospective improvements, and by this method be prepared at a moment's notice to take advantage of any favorable market conditions that might ensue, rather than be forced to participate with hastily made and immature plans in the rush to be first on the market when the hoped-for time arrives? In other words, why not have complete plans

on file in a safe-deposit vault along with deeds to the property? If you must be a coward be ready to follow when a brave leader gives the command: Forward, march!

Therefore, while labor worked ten hours a day thirty years ago for one dollar and a quarter and building cost was at least as high as to-day, I do not believe that ten years from now it would be surprising to find labor working but seven hours a day and receiving ten dollars, with materials proportionate, and likewise find building costs still within economic bounds for safe investment. I do not believe that there will be more than a slight reaction; costs will steadily advance, as they have during the period under discussion; in the meantime taxes will go on forever. An idle lot is no better than an idle mechanic; an idle dollar is worse.

Hooverize natural resources but conscript available units in the army of progress. Drill; don't slack. Make the idle lot productive; make the idle dollar work.

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